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# JAPANESE DIRECT INVESTMENT IN EUROPE

Methods, aspects and policy implications

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# Japanese Direct Investment in Europe

Motives, impact and policy implications

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# Preface

This is Volume II of a research project jointly conducted by the Sumitomo-Life Research Institute, Inc. and the Royal Institute of International Affairs. The project which commenced in the summer of 1989 has examined foreign direct investment (FDI) between Japan and the European Community. The Institutes have collaborated in studying various issues regarding FDI between the two regions, such as motives, impact on trade balances and the policies of host countries toward inward direct investment.

After almost one and a half years of research, the authors of the Japanese team present here the results of the study which is essentially the combination of theories, fieldwork and teamwork. Indeed, it was not an easy task to analyze what Japanese FDI means in the global context, partly because Japanese FDI is a recent phenomenon. We could not learn simply by looking at our past experience.

We would like to express our sincere gratitude to Dr Masaru Yoshitomi, who as the Japanese team leader in the joint project, greatly contributed to making the research project a success. We would also like to express our special thanks to the companies that were generous enough to accept to be interviewed. Thanks also go to the many experts in industry and government, too many to mention by name, whose suggestions and advice we drew on during the course of our study. Stephen Thomsen and Phedon Nicolaides of the Royal Institute of International Affairs have helped us greatly with the final preparation of the manuscript.

The other studies in the project include Volume I written by Stephen Thomsen and Phedon Nicolaides and individual papers on investment measures and GATT by Philip Hayes, Japanese investment and "1992" by Stephen Thomsen and Phedon Nicolaides, rules of origin by Brian Hindley and Japanese investment in France by Sawako Takeuchi.

We hope our study will contribute to a better understanding of role of Japanese FDI in the world economy.

The views expressed here are those of the authors and should not be attributed to Sumitomo-Life Research Institute, nor the organizations to which the authors belong.

Kazuhiro Hiroe  
Director General  
Sumitomo-Life Research Institute

December 1990

# Introduction

Foreign Direct Investment (FDI), particularly among developed countries, increased substantially in the 1980s. Japan emerged as one of the main investors, at least on a flow basis. Members of the European Community (EC) have also been actively investing both within and outside the Community. The US remains a major source of foreign investment. It also attracts more than half of the total FDI from developed countries. Approximately half of Japan's outward FDI is destined for the US where the growing foreign presence, Japan's particularly, has become a major political issue.

A number of bills restricting inward FDI have been introduced in the US Congress even though there is little possibility that they will be enacted into law. In absolute terms, Japan's FDI into the EC was less than half its FDI into the US during the 1980s. However, concern about the rapid inflow of FDI from Japan is also mounting in the EC. Major European countries are concerned not only about the presence of Japanese companies in their markets but also about the low penetration of their own companies into Japan, as is the case with trade.

The main purpose of this study is to give a comprehensive picture of FDI between Japan and the EC in order to improve public understanding of investment issues. To meet our objective we discuss two-way FDI between Japan and the EC in both manufacturing and non-manufacturing industries. Specifically, the study addresses the following issues.

What are the characteristics of Japan's outward FDI? Beginning with the problem of statistical definitions of FDI, Chapter 1 presents the characteristics



of Japan's FDI in the context of recent international trends. Chapter 1 also provides an overview of Japan's outward FDI over time and by region and industry. After considering several causes of the recent upsurge of outward FDI, such as the strong yen and trade friction, it examines in detail FDI in the EC and compares it with Japan's FDI in the US.

What are the motives behind Japanese manufacturing investment in the EC and what determines its location within the EC? Chapter 2 shows three major motives for manufacturing FDI: (a) globalization; (b) countering trade friction; and (c) the comparative advantage of local production. The chapter also provides a case study based on the results of interviews with Japanese parent companies and their affiliates in the EC. Moreover, it examines the ten major factors which affect the site selection of Japanese manufacturing companies.

How much impact will Japan's FDI in the EC have on its trade balance? First, Chapter 3 examines the relationship between Japanese exports and manufacturing FDI by industry. Then, after explaining in detail the method of estimation, it measures the direct impact of Japanese manufacturing FDI on the country's trade balance both with EC and the rest of the world. It relies on data from a MITI (Ministry of International Trade and Industry) survey and from the Japanese input-output table to estimate such effects as export substitution, reverse imports and export inducement (for capital goods and intermediate goods). The results are checked by a comparison with American FDI.

What characterizes Japan's financial FDI? Japan's outward FDI has been increasing more rapidly in the service sector than in the manufacturing sector. In particular, the rise in FDI in the financial, insurance and real estate industries has been striking. Chapter 4 examines Japan's FDI in banking, securities houses, and insurance industries. It analyses the motives for financial FDI, such as the need to give financial support to Japan's non-financial affiliates overseas and the gravitational pull of world financial centres. It also compares financial FDI in the EC with that in the US and Asia. It concludes by considering the implications of market integration within the EC.

What accounts for the low penetration of foreign companies in Japan? Chapter 5 addresses the issue of asymmetry between Japan's outward and inward FDI. Although the size of the imbalance varies depending on how FDI is defined, it always remains large. The chapter explains Japan's relatively low inward FDI on the basis of: (a) the legacy of past regulation of inward FDI; (b) the strength of Japanese firm- and industry-specific intangible assets in advance technology; and (c) the production and management systems or industrial structures unique to Japan such as the 'Keiretsu' (business groups) whose economic function is discussed in detail in Appendix 5.1.



# 1 Overview: Japan's direct investment in the EC

ICHIRO AKIMUNE

## Introduction

In this chapter, we provide some basic information on Japan's outward FDI that serves as the basis for discussion in subsequent chapters. In the first section we discuss the issue of defining FDI and refer to potential statistical problems. We also explain Japanese FDI statistics in detail. In the second section we discuss the history of Japan's outward FDI and its regional and sectoral distribution. We also examine the relationship between Japanese manufacturing FDI and exports. We then consider several driving forces that help explain the recent upsurge of Japan's outward FDI. In the final section we focus on Japan's FDI in the EC, and refer to FDI flows among the US, the EC and Japan.

## Definition of FDI and methodological problems

The International Monetary Fund (IMF) defines FDI in its Balance of Payments Statistics Manual (fourth edition 1977) as follows:

FDI is '...investment that is made to acquire a lasting interest in an enterprise operating in an economy other than that of investor, the investor's purpose being to have an effective voice in the management of the enterprise.'

There are two forms of cross-border capital movement: FDI and portfolio investment. Direct investment is motivated by the desire to control a foreign

company, while portfolio investment seeks a higher return or risk diversification. Although this definition of FDI is commonly accepted, it turns out to be very difficult to distinguish FDI from portfolio investment statistically since 'a lasting interest' and 'an effective voice' are ambiguous terms. There is what we call a grey zone between FDI and portfolio investment (Komiya, 1988). In 1983, the Organization for Economic Co-operation and Development (OECD) suggested that a holding of 10 per cent or more of the shares or voting stock should be the benchmark definition of FDI. The actual minimum ownership level for FDI varies by country. For example, it is 25 per cent for Germany, 20 per cent for the UK and France, and 10 per cent for the US and Japan.

The OECD also suggested that FDI figures should include reinvested earnings, which are earnings made by foreign affiliates excluding dividends or remittances to their parent companies. The US, the UK and Germany adopt this suggestion, while Japan and France do not. In the case of US outward FDI, reinvested earnings were \$15.2 billion in 1988, accounting for 87 per cent of total US outward FDI. In the case of inward FDI to the US, the figures were \$6.6 billion or 11 per cent. For the UK, the ratios of reinvested earnings to outward and inward FDI in 1987 were 39 per cent and 40 per cent respectively. This implies that reinvested earnings greatly influence FDI calculations particularly for those countries that have a long history of FDI such as the US and the UK. Since Japan is a newcomer as an international direct investor, the fact that Japanese FDI statistics exclude reinvested earnings does not significantly affect its FDI figures. Taking the size of current Japanese investments overseas into account, however, Japan will need to alter the measurement of FDI to include reinvested earnings.

Another statistical problem arises when a company makes loans to a foreign affiliate to buy foreign bonds. These loans are recorded as FDI even though they constitute portfolio investment. This is often the case with Japanese life insurance companies. In some cases it is difficult to identify an ultimate host country of FDI. If a parent company in country A invests in country C by way of its foreign affiliate in country B, statistically it is often recorded that FDI of country A is made to country B.

Still another problem arises when a parent company raises funds abroad through its foreign affiliate. This is usually not recorded as FDI though some countries would record it as a disinvestment. In the early 1980s, US outward FDI actually declined, partly because many US companies raised capital from the Euro-market through their financial affiliates in the Netherlands Antilles to take advantage of a favourable withholding tax treaty. US direct investment capital outflows consist of three elements: (1) net increases in US parents' equity in their foreign affiliates; (2) reinvested earnings of foreign affiliates; and (3) intercompany debt outflows - the increase in US parents' net intercompany accounts receivable from their foreign affiliates. When US



parent companies raise funds through their Netherlands Antilles financial affiliates, it is regarded as an intercompany inflow, hence reducing US FDI outflows.

To analyze the impact of FDI on a host country, it is more reasonable to use stock rather than flow data. However, there are few nations that have stock data on FDI and even then they are reported at book value. In the case of the US, J.P. Morgan (1989) estimated that the market value of the US FDI stock abroad was over one trillion dollars at the end of 1988, more than three times as large as its book value. In sum, there are many problems with the definitions and statistical measurement of FDI, making it difficult to grasp FDI or to make international comparisons.

### **Statistics on Japan's FDI**

There are two sources of official statistics on Japan's FDI. One is the 'Statistics of Japan's outward FDI on a notification basis,' published by the Japanese Ministry of Finance (MOF). 'Notification basis' means that all Japanese companies that invest in foreign countries are in principle required to report in advance to the MOF in accordance with the foreign exchange law, with the exception of FDI of less than 30 million yen (about \$200,000) and the acquisition of equity as an inheritance identified as FDI. The following FDI categories must be reported in advance to the MOF regardless of the amount: (1) in the fisheries, leather, textile, weapons, pharmaceutical, banking and securities industries; (2) in the Republic of South Africa or Namibia; and (3) by banking and securities industries.

The MOF statistics have several defects. First, there is a time lag between when FDI is planned and when it is actually implemented. Furthermore, it is sometimes implemented in discrete phases or partially or totally abandoned. Second, the statistics do not reflect repayment of loans and bonds by Japanese foreign subsidiaries to their parent companies, or withdrawal of foreign capital. These two defects lead to a bias toward overstatement. Lastly, there is a discontinuity between pre-and post-1980, when the foreign exchange law was liberalized. Specifically the minimum equity share regarded as FDI was reduced from 25 per cent to 10 per cent, and purchasing foreign real estate except through loans to foreign subsidiaries was no longer regarded as FDI. Regarding Japan's inward FDI, the statistics on a notification basis are different from those for outward FDI in that they have no minimum equity share and include reinvested earnings.

The other source is the 'Japanese Balance of Payments Statistics' published by the Bank of Japan (BOJ). The BOJ data are based on reports from the Japanese foreign exchange banks. Unlike the MOF statistics, the BOJ data show the actual and net flow, reflecting withdrawal of Japanese capital abroad

and repayment of loans and bonds. The ratio of FDI flows in the balance of payments to those on a notification basis has been about 70 per cent in recent years. The discrepancy in the FDI figures between the two statistics are mainly due to the differences between advanced reporting and actual investment. In addition, the MOF data include *Baikouyushi* - loans to natural resource developers in a foreign country on the condition that repayments are offset by imports of the products. The BOJ statistics do not include reinvested earnings. While the BOJ statistics show only the regional distribution of Japan's FDI, the MOF statistics indicate both regional and industrial breakdowns. Consequently the MOF statistics are more often referred to in the literature on Japan's outward FDI.

The 'Japanese assets and liabilities statistics,' published by the MOF show the stock of Japan's FDI. They indicate neither the regional nor the industrial distribution. The figures are almost the same as cumulative FDI in the balance of payments statistics.

Another source related to Japan's outward FDI is the 'Survey on Overseas Activities of Japanese Companies' which is a questionnaire survey of parent companies and their foreign affiliates conducted annually by the Ministry of International Trade and Industry (MITI). More detailed information is available every three years in the form of the 'Basic Survey'. Specifically the MITI survey provides data on Japanese firms' fixed investment abroad, finance, sales and procurement, employment, inter-company trade, and so forth. It is somewhat similar to the benchmark survey on US FDI. However, unlike the US benchmark survey, it has two shortfalls: first, finance, insurance real estate are excluded; second, the response ratio measured by the number of parent companies is as low as 50 per cent. Generally, the statistics on FDI are not sufficient for economic analysis.

## Recent developments in international FDI

Outward FDI of major countries, which experienced steady growth during the 1970s, has been increasing strikingly since 1982. In particular, the outward FDI of the OECD countries grew around 50-60 per cent annually in dollar terms from 1985 to 1987. In 1988, however, it remained at the level of the preceding year mainly because outward FDI from the US decreased by 60 per cent as some US parent companies withdrew capital mainly from their affiliates, mainly in Europe, to finance domestic mergers and acquisitions (M&As). Excluding the US, the total OECD outward FDI grew by double digits in 1988 as well. For the first time in 1988, Japan became the largest foreign direct investor in the world on a flow basis.

According to estimates by JETRO (Japan External Trade Organization), the FDI stock in the world stood at \$1 trillion as of the end of 1988,

approximately 90 per cent of which was accounted for by seven industrialized nations: the US, Japan, the UK, West Germany, the Netherlands, France, and Canada (see Table 1.1). The US accounted for 31.7 per cent of the world FDI stock, followed by 17.8 per cent for the UK and 10.7 per cent for Japan at the end of 1988, while the figures were 47.1 per cent, 16.5 per cent, 5.1 per cent respectively in 1981. The relative position of the US as a global investor has been declining since 1980, while Japan's share has been rising at a remarkable pace. Nevertheless, the ratio of Japan's FDI stock to its GNP was 3.9 per cent in 1988, still the lowest of the seven countries.

Table 1.1  
FDI stock in major countries end 1988

	Amount (\$ billion)	Share (per cent)	FDI/GNP (per cent)
US	326.9	31.7	6.7
UK	183.7	17.8	22.1
Japan	110.8	10.7	3.9
Germany	97.3	9.4	8.1
Netherlands	70.2	6.8	30.9
France	58.1	5.6	6.1
Canada	50.7	4.9	10.8
Sub-total	897.7	87.0	7.9
World Total*	1031.8	100.0	

Note: \*Estimation by JETRO: 1031.8 is obtained by dividing 897.7 by 0.87, which is the share of the cumulative FDI flow of the seven countries from 1970 to 1987 in the world total in the IMF Balance of Payments Statistics.

Source: JETRO 1990a.

By sector, while FDI in the manufacturing industries has increased in absolute terms throughout the 1980s, FDI in the service sector has been growing more rapidly, accounting for 40 per cent of the total FDI on a stock basis by the end of 1985, and 50 per cent on a flow basis since 1980 (JETRO, 1990a). As is shown in Table 1.2, the extent varies among G-5 countries.<sup>1</sup> The share of FDI in the service sector has increased remarkably in Japan,



Table 1.2  
The share of services in total outward FDI  
(per cent of total stock)

	1980	1988	Change
Japan	25	58	33
US	33	41	8
UK	38	39	1
Germany	31	31	0
France	44	40	-4

Source: Julius 1990, p. 32.

followed by the US, while it has changed little in the three European countries. Within the service sector, FDI in finance and insurance have been gaining in share noticeably, followed by FDI in the real estate industry.

Taking into account the theory of economic development, it is natural that most FDI comes from the industrialized countries. It does not necessarily follow that the developing countries should be major recipients of FDI. Indeed, the developed nations are playing a major role in both receiving and providing FDI, accounting for 88 per cent of total inward FDI in the world in 1987, compared with 66 per cent in 1981. For the OECD countries, the ratio of the cumulative FDI inflow to the outflow was 0.60 in the 1960s, 0.62 in the 1970s and 0.66 from 1981 to 1988 (see Table 1.3). In particular, the US attracted 53.8 per cent of the cumulative outward FDI from OECD countries from 1981 to 1988 (60.4 per cent in 1988), compared with 14.9 per cent from 1961 to 1970. Investment in the developing countries has been stagnant in the 1980s.

In spite of its prominent role in outward FDI, Japan accounts for only about one per cent of inward FDI of the OECD total on a flow and stock basis. Although recent FDI is taking place among the industrialized nations, the ratio of inward to outward FDI varies by country. For example, the ratio is 1.76 for the US, 0.56 for the EC, and 0.03 for Japan on a cumulative flow basis from 1981 to 1988. The US is a net importer of FDI, the EC as a whole is the most balanced, and Japan is a net exporter of FDI.

In addition, there has been a change in the form of FDI since 1980. M&A activities are in fashion in Europe where the reorganization of enterprises is accelerating in preparation for the unification in 1992 and in the US where the restructuring boom has been continuing. For example, according to the US Department of Commerce, foreign direct investors, including their affiliates in the US, spent \$56 billion, or 86 per cent of their total outlays in 1989



Table 1.3  
Ratio of inward FDI to outward FDI

	61-70	71-80	81-88
US	0.13	0.42	1.76
EC	1.19	0.84	0.56
UK	0.58	0.73	0.45
Netherlands	0.85	0.39	0.48
Germany	1.53	0.60	0.18
France	1.06	1.21	0.59
Italy	2.18	1.58	0.86
BLEU	4.20	2.87	1.62
Spain	13.34	5.54	6.36
Denmark	6.78	1.47	0.65
Japan	0.43	0.08	0.03
Canada	3.70	0.49	0.12
Total	0.60	0.62	0.66

Source: Author's calculations based on OECD (1989) statistics.

acquiring US enterprises. (The remaining 14 per cent were spent establishing affiliates.) The figures were \$5 billion and 40 per cent respectively in 1983.

Why has FDI among the industrialized countries been in a boom in the 1980s, particularly since 1985? First, the developed countries have succeeded in offering a favourable economic environment that has, in general, kept business minds rather optimistic about the future. Foreign direct investment from almost all OECD countries declined in the early 1980s when their economies were depressed. Throughout the rest of the 1980s, the OECD economies expanded continuously. In contrast, the developing countries, particularly those suffering from debt burdens like the Latin American countries, are still stagnating and are less attractive for foreign investors. The exceptions are Asian Newly Industrialized Economies (NIEs) and ASEAN countries,<sup>2</sup> which are enjoying relatively high growth and which continue to be attractive as investment locations.

Second, the rapid growth of FDI has been boosted primarily by FDI in the service sector such as telecommunications, transportation, finance and insurance. This phenomenon can be explained by the trend of privatisation, liberalization, and deregulation seen in major developed countries including Japan. This trend will not only eliminate barriers that prevent cross border capital flows, but will also offer various business opportunities (Julius and

Thomsen 1988, OECD 1989). In this sense, the unification of the EC in 1992 and the bilateral free trade agreement between the US and Canada in 1989 are likely to facilitate inward FDI in these regions. Furthermore, the development of new technologies such as computerization is also facilitating this trend by reducing transaction costs.

## **Japan's outward FDI**

### *Historical view*

Japan's outward FDI has been affected by internal factors such as its stage of economic development and by external ones like the exchange rate of the yen, trade friction between the US or the EC and Japan, and host countries' policies towards inward FDI. At a microeconomic level one finds firms' strategic concern for 'globalization' as a motive for the recent acceleration of Japan's outward FDI. Let us now turn to a brief historical survey of Japan's outward FDI (see Tables 1.4 and 1.5).

After its defeat in World War II, Japan lost all of its assets abroad. In the 1950s and 1960s Japan's outward FDI was negligible owing to the restrictions on outflows of foreign reserves. On average the annual outflow of Japan's FDI was \$30 million in this period, the equivalent of about 0.1 per cent of GNP. Japan's typical outward FDI was oriented toward exploiting natural resources such as crude petroleum, iron, and copper. Fearful of natural resource shortages, the Japanese government supported this type of FDI, referred to as 'national projects', through low-interest loans from the Export-Import Bank (Eximbank) of Japan, overseas investment insurance, and the establishment of the Japan National Oil Corporation and the Metal Mining Agency of Japan. The other type of Japanese FDI representative of this period was oriented toward facilitating Japanese trade, especially exports. Japanese trading companies and banks built offices, branches or subsidiaries in their major export markets. By region, natural resource-oriented FDI was dominant in Asia and export-oriented FDI in North America and Europe. These three regions accounted for 21 per cent, 25 per cent and 18 per cent respectively of the cumulative flow in this period.

Japan's outward FDI more than doubled between 1972 (\$723 million) and 1973 (\$1.9 billion) as its ratio to GNP reached 0.5 per cent in 1973. Behind this acceleration was the huge current account surplus, which led Japanese authorities to liberalize capital outflows and to allow for increases in the money supply. Japan's outward FDI for the rest of the 1970s was stagnant since the world economy was depressed after the two oil crises. It did not exceed the 1974 level in real terms until 1981.

Table 1.4  
Japan's outward FDI: regional distribution  
(\$ million)

	Total	North America	Europe	Asia	Latin America	Oceania	Africa	Middle East
(Cumulative)								
1951-60	283	88	3	49	85	2	1	56
1961-70	3294	824	636	703	482	279	92	278
1971-80	32920	8886	3832	9078	5602	2244	1352	1925
1981-89	217398	99195	40501	30634	30686	11409	3830	1145
1981-85	47152	17167	6531	9634	9468	1718	1924	713
1986-89	170246	82028	33969	21002	21219	9691	1905	431
(Annual)								
1986	22320	10441	3469	2327	4737	992	309	44
1987	33364	15357	6576	4868	4816	1413	272	62
1988	47022	22323	9116	5568	6428	2609	653	259
1989	67540	33902	14808	8238	5238	4618	671	66

Source: Ministry of Finance, Japan

Table 1.5  
Japan's outward FDI: industrial distribution  
(\$ million)

	51-70	71-80	81-89	81-85	86-89	86	87	88	89
Food	51	535	2679	505	2174	127	328	419	1300
Textiles	190	1448	1564	445	1119	63	206	317	533
Lumber & pulp	213	546	1895	362	1533	57	317	604	555
Chemicals	50	2576	6050	1356	4667	355	910	1293	109
Iron, steel, nonferr. metals	138	2481	6643	2571	4072	328	786	1367	1591
Machinery	68	826	5584	1077	4507	626	687	1432	1762
Electric/Electronic	75	1506	13095	2166	10929	987	2421	3041	4480
Transport equipment	87	892	8030	2395	5635	828	1473	1281	2053
Others	221	833	8037	947	7090	435	703	4051	1901
Manufacturing	929	11645	53553	11826	41727	3806	7832	13805	16284
Agriculture & forestry	76	533	596	171	425	15	97	162	151
Fisheries	27	274	378	141	237	52	44	94	47
Mining	776	6267	8168	4683	3485	669	511	1013	1262
Construction	36	360	1693	401	1292	250	87	309	646
Commerce	380	5028	19751	7269	12482	1861	2269	3204	5148
Finance & insurance	318	2108	54845	8433	46412	7240	10673	13104	15395
Services	46	1344	21985	3293	18688	1560	2780	3732	10616
Transportation			15269	5900	9369	1925	2145	2372	2927
Real estate			34742	2533	32209	3997	5428	8614	14143
Others	579	3838	3097	1491	1606	376	1047	3	180
Non-manufacturing	2249	19771	160496	34316	126180	17949	25080	32634	50517
Total*	3578	32920	217398	47152	170246	22320	33364	47022	67540

Note: \*The total includes real estate before 1980 and branches which cannot be classified into industries.

Source: Ministry of Finance, Japan



In the early 1970s Japan's outward FDI was for the most part concentrated in manufacturing industries such as textiles and electronics, which established factories mainly in Asia to take advantage of lower wages. In the latter half of the 1970s, Japan's outward FDI shifted to the exploitation of natural resources again because the two oil crises heightened fears of shortages in primary commodities. As a result, Asia received as much as 28 per cent of Japan's total FDI, followed by North America with 27 per cent.

### *Japan's outward FDI in the 1980s*

According to official statistics, Japan's outward FDI exceeded \$10 billion on a notification basis for the first time in 1984.<sup>3</sup> It increased by more than \$10 billion annually beginning in 1986 to reach \$67 billion by 1989. As a result, Japan's cumulative outward FDI from 1986 to 1989 accounted for about 70 per cent of total outward FDI since 1951. The number of Japanese companies reporting in advance of investment overseas, which had been in the 2,000 range from 1978 to 1985, also increased strikingly to 6,589 in 1989. Japan's outward FDI in the balance of payments statistics shows the same upsurge as on a notification basis. It recorded \$34 billion in 1988 and \$44 billion in 1989. In 1988, Japan overtook the US to become the largest foreign direct investor on a flow basis. The ratio of outward FDI to GNP also increased rapidly from 0.5 per cent in 1985 to 1.6 per cent in 1989 on a balance of payments basis. In yen terms, Japan's outward FDI grew slightly more slowly than it did in dollar terms; in 1989 it was four times as large as in 1985, compared with 6.8 times in dollar terms on a balance of payments basis. This was due to the drastic appreciation of the yen against the dollar since the Plaza Accord in 1985.

The acceleration since 1985 can be described as the second FDI boom since 1972 and 1973. The ratio of outward FDI to Japan's GNP returned to the 0.4 per cent level in 1981 (except 1983) and jumped to 0.7 per cent in 1986, followed by 0.8 per cent in 1987, 1.2 per cent in 1988 and 1.6 per cent in 1989 on a balance of payments basis. A primary feature of this period is the concentration of Japan's outward FDI in industrialized countries. The combined share in the US and the EC of cumulative Japanese outward FDI increased dramatically from 38 per cent in the 1970s to 61 per cent in the 1980s on a notification basis.

Almost half of Japan's outward FDI in the latter half of the 1980s was directed toward the US, though the EC share also increased, particularly since 1984, from 11 per cent in 1980 to 22 per cent in 1989 on a balance of payments basis. The US, the EC, and Japan now form a tripolar relationship in the world economy. The relationship between Japan and the EC is the weakest of the three links. Partly reflecting this, there are few studies focusing on two-way direct investment between Japan and the EC countries. The



European countries are, however, becoming increasingly important for Japan because of the formation of a single European market in 1992 and recent developments in Eastern Europe, both of which will accelerate Japan's FDI in Europe. Without an accurate understanding of the benefits from FDI for both home and host countries, the expected acceleration of Japan's FDI in Europe will likely cause friction between Japan and Europe.

Another feature of Japan's outward FDI was that non-manufacturing industries, excluding the resource-development type such as agriculture and forestry, fisheries and mining, accounted for 70 per cent of Japan's cumulative total outward FDI in the 1980s, compared with 39 per cent in the 1970s on a notification basis. The finance and insurance, and real estate industries were dominant with a share of 27 per cent and 19 per cent in total cumulative Japanese FDI respectively. Their outward FDI was almost as much as the total cumulative FDI in the manufacturing industries during this period. Before 1980 commerce dominated FDI within the non-manufacturing sector, serving as a conduit for Japanese exports. In the 1980s, Japanese non-manufacturing companies established their own offices, affiliates and branches abroad not only to facilitate Japanese exports but also to expand their own business.

Japan's FDI in the manufacturing sector has also been increasing since 1985. The overseas production ratio of Japanese manufacturing companies increased from 3.0 per cent in FY 1980 to 4.9 per cent in FY 1988 (MITI, 1989). Huge Japanese trade surpluses with the US and the EC have led to various import quotas and voluntary export restraints (VERs) on specific Japanese exports such as automobiles, video tape recorders (VTRs) and semiconductors. Faced with these actual or anticipated trade barriers, Japanese manufacturing companies started to shift their production bases into these markets in order to maintain or enlarge their market share. This type of FDI is common into the US and the EC and is a distinctive feature of internationally competitive Japanese manufacturing industries. In contrast, Japanese manufacturing FDI in Asia is aimed at taking advantage of relatively low wages, especially after the appreciation of the yen. Japanese manufacturing subsidiaries in Asia exported 15.8 per cent of their total sales to Japan, while those in the US and the EC exported only 2.7 per cent and 1.1 per cent respectively to Japan in 1987, according to the questionnaire survey conducted by MITI (1989). This implies that Japan's FDI in Asia has been playing an important role in facilitating horizontal industrial integration between Japan and the rest of Asia, while Japan's FDI in the US and the EC is aimed at serving host countries' markets by substituting for Japanese exports.

Finally, in terms of the form of Japan's outward FDI, M&As have been increasing rapidly in recent years compared with the 'greenfield' type, where the Japanese company builds a new factory in the foreign country. According to a Japanese securities company, M&As by Japanese firms of non-bank foreign companies increased by about three times from 146 (88 for the US

and 21 for Europe) in 1986 to 408 (200 and 100 respectively) in 1989 (NRI,1990). The motivation behind this phenomenon might be the unification of the EC in 1992 and the restructuring boom in the US and the EC, where the economic environment is changing so fast that companies could miss potential business opportunities or run behind competitors unless they respond quickly. Another motivation for M&As is to gain the advantages that foreign companies have in areas such as local information, established relations with customers, and brand-names or trademarks.

### *Regional and sectoral distribution*

Japan's cumulative outward FDI reached \$254 billion as by the end of 1989 on a notification basis (see Table 1.6. North America has received 43 per cent of the total, followed by Europe with 18 per cent, Asia with 16 per cent, Central and South America with 15 per cent, and Oceania with 6 per cent. The Middle East and Africa combined have received less 4 percent of the total. Japan's cumulative outward FDI in North America increased 11.2 times during the 1980s compared with the 1970s, 10.6 times for Europe, 5.5 times for Central and South America, and 3.4 times for Asia. It is due to tax advantages that Central and South America has a rather high share as a host region to Japan's outward FDI. Although Japan's FDI in North America is still the largest, Japan's FDI in Europe has shown the greatest increase in 1989, growing from 15.5 per cent in 1985 to 21.9 per cent in 1989.

By industry, the manufacturing sector accounts for 26 per cent of Japan's accumulated outward FDI since 1951, and the non-manufacturing sector's share is 72 per cent. The manufacturing share declined from 35 per cent in the 1970s to 25 per cent in the 1980s, although it rose to 24 per cent in 1989 after falling as low as 17 per cent in 1986.

In the manufacturing sector, the largest share of Japan's total accumulated FDI was 22 per cent in the electrical and electronic machinery sector, followed by 14 per cent for iron and steel/nonferrous metals, 13.6 per cent for transportation machinery, and 13.5 per cent for other manufacturing. As of the end of 1980, chemicals had the largest share with 20.9 per cent, iron and steel/nonferrous metals with 20.8 per cent, textiles with 13 per cent, and electrical and electronic machinery with 12.6 per cent. Thus the relative shares of electrical and electronic machinery, transportation equipment, and general machinery rose in the 1980s.

In the non-manufacturing sector, while the share of mining used to be relatively high (as of the end of 1980 it was 9.6 per cent of Japan's total cumulative FDI and 21 per cent of that of the non-manufacturing sector), the share of service industries, in particular finance, insurance and real estate, has risen dramatically. Indeed, Japan's outward FDI in the financial and insurance industry, which is mainly concentrated in the US and the EC, is comparable

Table 1.6  
Japan's outward FDI, 1951-89: regional and industrial distribution  
(\$ million)

	North America	Europe	Asia	Latin America	Oceania	Africa	Middle East	Total
Food	1485	311	1049	234	177	8	0	3265
Textiles	651	489	1569	440	11	39	4	3203
Lumber & pulp	1847	17	450	202	137	1		2654
Chemicals	3581	1110	2077	602	126	24	1130	8649
Iron, steel, nonferr. metals	3656	395	2578	2010	428	127	66	9261
Machinery	3277	1339	1387	393	70	1	11	6479
Electric/electronic	8686	2016	3348	536	66	8	15	14676
Transport equipment	4453	1352	1326	1070	786	17	4	9009
Others	5894	917	1807	143	118	7	46	8932
Manufacturing	33529	7947	15591	5633	1919	231	1276	66127
Agriculture & forestry	430	8	297	208	253	7	2	1205
Fisheries	158	18	177	147	79	99	1	678
Mining	1889	1416	7124	1557	2244	582	399	15211
Construction	1015	84	643	219	65	22	40	2089
Commerce	14146	5404	2575	1759	1218	14	44	25159
Finance & insurance	16996	21258	3588	13715	1554	37	123	57271
Services	12038	2487	4815	1271	2050	710	5	23375
Transportation	411	157	982	10873	142	2702	2	15269
Real estate	24637	3669	2351	200	3816	69	347	42
Others	2215	1056	1632	1203	523	798	87	7515
Non-manufacturing	73935	35556	24183	31153	11945	5040	705	182516
Total	108993	44972	40472	36855	13933	5275	3404	253896

Source: Ministry of Finance, Japan



to total Japanese manufacturing FDI on a flow basis. Japan's outward FDI in real estate surged recently, especially in the US.

How is Japan's manufacturing FDI related to the country's export structure? Tables 1.7 and 1.8 are matrices of Japanese exports by region and commodity in 1980 and 1989. They show dynamic changes in the Japanese export structure. By region, the concentration of Japanese exports has increased in three regions: North America, Western Europe and Southeast Asia. The aggregated share of these three regions in total Japanese exports reached 83 per cent in 1989, compared with 66 per cent in 1980 and 73 per cent in 1985. Among them, Western Europe and Southeast Asia have recently been gaining in their share of total Japanese exports.

These three regions also attract most of Japan's manufacturing FDI reflecting the importance of market size and information costs. A company can become familiar with the market structure and consumers' tastes of the foreign country through exports thus reducing information costs when investing.

Japanese exports are dominated by the machinery sector, increasing from 63 per cent of total exports in 1980 to 74 per cent in 1989. Within this sector, transportation equipment, and electrical and general machinery are almost equally distributed with a share of 22-24 per cent of total Japanese exports in 1989. These can be characterized as high value-added commodities supported by advanced Japanese technology.

Japan's manufacturing FDI in North America and Europe is concentrated in electrical and electronic machinery, transport equipment and general machinery, following the same pattern as Japanese exports to those regions. In general, those industries with high comparative advantages have invested the most in the US and the EC, while those industries with declining comparative advantages have invested in Asia.

### *General factors responsible for the surge of Japan's FDI*

The essence of FDI is a transfer of 'intangible assets' specific to a firm or an industry, such as technology or management skills. Therefore, FDI should be regarded as a firm- or a sector-specific phenomenon rather than as a macroeconomic one. Nevertheless, in the latter half of 1980s there were several macroeconomic forces that seemed to accelerate Japan's outward FDI: the appreciation of the yen, trade friction, etc. In this section we will examine their role in Japan's outward FDI.

*Expansion of the world economy* The world economy offered a favourable economic environment for investors during the latter half of the 1980s. From 1982 to 1989, the OECD economies including Japan expanded continuously, with an annual growth rate of 3.5 per cent from 1986 to 1988. Stable

Table 1.7  
Japanese export structure in 1980 (commodity by region)  
(\$ million)

	North America	Western Europe	Southeast Asia	Latin America	Oceania	Africa	Western Asia	Communist Bloc	Total
Food	291	147	573	50	99	209	213	7	1588
Raw materials & fuels	89	214	584	113	24	38	26	183	1271
Textile goods	663	528	2220	239	252	398	1224	771	6296
Nonmetallic mineral products	506	213	531	41	94	38	369	72	1863
Other light industrial products	1813	1934	1647	332	347	340	888	327	7627
Chemical goods	845	881	3024	272	302	158	257	1029	6767
Metal goods	4505	1569	6293	1610	491	1142	2724	2985	21319
Machinery	24663	15545	15617	6220	2843	5667	7332	3594	81481
(General machinery)	3639	2568	5290	1341	657	953	1681	1959	18088
(Electrical machinery)	5515	5152	5227	1743	642	1136	2517	828	22760
(Transportation equipment)	13631	5734	3922	2766	1381	3430	2822	685	34373
(Precision instruments)	1878	2090	1179	369	164	148	311	121	6260
Total	33804	21448	30910	8917	4473	8016	13083	9156	129807

Source: Ministry of Finance, Japan



Table 1.8  
Japanese export structure in 1989 (commodity by region)  
(\$ million)

	North America	Western Europe	Southeast Asia	Latin America	Oceania	Africa	Western Asia	Communist Bloc	Total
Food	334	160	900	41	133	42	35	40	1687
Raw materials & fuels	260	174	1258	74	36	16	50	189	2056
Textile goods	973	922	3159	75	223	148	609	751	6862
Nonmetallic mineral products	971	345	1267	38	122	47	63	199	3053
Other light industrial products	5508	3840	3712	412	678	316	815	468	15748
Chemical goods	2665	2693	7088	277	421	159	187	1288	14776
Metal goods	4787	1356	9311	580	588	489	969	3497	21577
Machinery	83196	45983	45609	7785	7680	4212	5044	5963	205471
(General machinery)	23988	12406	16632	1258	1908	1016	1264	2613	61085
(Electrical machinery)	22044	14921	19487	1940	1460	679	1377	2544	64454
(Transportation equipment)	32302	14414	6533	4299	3973	2377	2087	611	66596
(Precision instruments)	4861	4242	2956	287	339	140	317	194	13337
Total	99997	55637	73516	9381	9975	5453	7833	12643	275175

Source: Ministry of Finance, Japan

economic growth at home and abroad is a fundamental factor promoting investors' optimistic expectations about the future. In contrast to industrialized economies, the less developed countries, like those in Latin America troubled by political and economic instability, have proven to be less attractive for foreign investors.

*Asset price inflation* The latter half of the 1980s witnessed skyrocketing Japanese land and stock prices, which increased the collateral of Japanese companies seeking to borrow large amounts of money. High stock prices enabled Japanese companies to finance investment at a significantly lower cost than their foreign competitors, particularly in the case of M&As. At the same time the exceptionally high value of Japanese land lowered the return of real estate investment in Japan, which made real estate investment abroad relatively advantageous.

*Appreciation of the yen* The yen appreciated against the US dollar by almost twofold from 1985 to 1988. This had an important effect on relative prices between domestic and foreign products, among which relative wages were the most significant. In the latter half of the 1980s, although there was a modest rise in domestic wages, the appreciation of the yen gave added incentives to produce in foreign countries with cheaper labour, particularly for labour-intensive industries. According to MITI's survey (MITI, 1990), taking advantage of cheaper labour is ranked highly as a motive for Japanese manufacturing investment in Asian countries, particularly in the electrical and electronic machinery industry. In that sense, the appreciation of the yen accelerated the timing of cost-oriented FDI.

It is often said that the strong yen made foreign assets cheaper, thereby increasing Japan's outward FDI, particularly in the real estate industry. This is not easily explained from a theoretical point of view. Indeed, as a result of the appreciation of the yen, foreign assets can be acquired with fewer yen-denominated assets, but the return on foreign assets also decreases in yen terms, hence the rate of return remains unchanged. In terms of the rate of return, the strong yen increases FDI only when the currency is expected to depreciate in the future.

It is not cost-oriented FDI into the developing countries but market-oriented FDI into the developed nations that accounts for most of Japan's outward FDI in the 1980s. Therefore, the appreciation of the yen can only explain a small portion of the recent surge of Japan's FDI.

*Trade friction* It is generally believed that the trade friction with the US and EC has intensified along with the Japanese trade surplus in the 1980s. Looking more closely, however, the trade friction in specific industries or products occurred when Japanese exports of those industries or products

increased so much that competitors in the host countries either lost or risked losing market share. In this sense, trade friction is not a macroeconomic phenomenon but a sectoral one: automobiles for the US and the EC, VTRs for the EC and semiconductors for the US and the EC. In each case the US or the EC restricted imports from Japan through import quotas, anti-dumping duties, or voluntary export restrictions. In order to circumvent those barriers and to protect market share, Japanese companies chose to produce in foreign markets. This type of FDI may be described as an alternative to exports.

*Japanese corporate strategy* Changes in Japanese multinational enterprise (MNE) strategy in recent years is also an important factor in explaining outward FDI by Japanese firms. According to MITI's survey conducted in January 1990, Japanese manufacturers' strategy for overseas activities five years ago was characterized as export-oriented, seeking to enhance their exports through sales agents owned by Japanese trading companies, or through their own sales affiliates abroad. This export-oriented strategy has now shifted to local production in response to various changes in the business environment such as the appreciation of the yen since 1985, the trend toward regional integration, and the diversification of consumers' tastes. In the MITI survey almost half of those Japanese manufacturers surveyed responded that they would develop intercompany operations based on the comparative advantages of their foreign affiliates in five years time. It is necessary to conduct research and development (R&D) activities in a customers' country in order to know their needs as soon as possible and to develop new products to meet these needs. Thus, localizing R&D activities has become an important element of the globalization process of Japanese MNEs.

There is no single decisive factor to explain the recent surge of Japan's outward FDI. Instead, it might be concluded that various factors from macroeconomic to microeconomic ones as examined above, combined together, brought about the boom of Japan's FDI in the 1980s.

## **Japan's FDI in the EC**

### *Characteristics*

Since 1980 the EC has become an important host region to Japan's outward FDI. Among the top twenty host countries for Japan's FDI on a notification basis during the 1950s and 1960s, the UK ranked second but was the only European nation at the time. In the 1970s West Germany and France were added to the list. Luxemburg and the Netherlands were added in the 1980s. Table 1.9 sets out Japanese direct investment flows to the EC prior to the 1980s and during the past five years.

Table 1.9  
Japanese direct investment into the EC Countries\*  
(Upper row: all industries; Lower row: manufacturing)  
(\$ million)

	1951-79	1985	1986	1987	1988	1989
EC*	3,432	1,815	3,320	6,269	8,319	13,933
	600	280	326	815	1,458	
UK	1,823	375	984	2,473	3,956	5,239
	91	83	126	289	335	
Neth.	257	613	651	829	2,359	4,547
	30	17	35	37	702	
Lux.	95	300	1,092	1,764	657	654
Germany	387	172	210	403	409	1,083
	58	19	32	109	82	
France	300	67	152	330	463	1,136
	55	37	65	79	148	
Spain	151	91	86	283	161	501
	136	91	22	261	76	
Belgium	225	84	50	70	164	326
	86	27	25	15	69	
Ireland	135	81	72	58	42	133
	109	1	6	0	8	
Italy	59	32	23	59	108	314
	35	5	15	25	38	
World	31,804	12,217	22,320	33,364	47,022	57,373
	10,867	2,352	3,806	7,832	13,805	

Note: \*Figures for Denmark, Greece and Portugal are not available

Source: Ministry of Finance, Japan

In terms of the composition of Japan's cumulative FDI in Europe, nearly 40 per cent was in the UK, followed by the Netherlands, Luxembourg, West Germany and France. For manufacturing, the UK and the Netherlands are in the same rank, followed by Spain. Table 1.10 provides the cumulative total of Japanese direct investment in the EC disaggregated by country and by sector. Non-manufacturing industries account for 80 per cent of Japan's total accumulated FDI in Europe, a percentage higher than that in the US. In the manufacturing sector, electrical and electronic machinery and transportation equipment are relatively dominant. In the non-manufacturing sector, financial



and insurance industries have the largest share, while, in the case of Japan's FDI in the US, the real estate industry has the largest share.

### *The index of FDI specialisation by industry*

The index of FDI specialisation by industry (FSI) may help to indicate the pattern of FDI more clearly. FSI (i,A) of Japan's FDI in the industry *i* into country A is defined as follows.

$$FSI(i,A) = \frac{\frac{\text{Japan's outward FDI in the } i\text{th industry of country A}}{\text{Japan's total outward FDI in country A}}}{\frac{\text{Japan's outward FDI in the } i\text{th industry}}{\text{Japan's total outward FDI to the world}}} * 100$$

Table 1.11 shows the FSI for each industry into the EC countries (excluding Greece and Denmark) based on Japan's cumulative outward FDI since 1951. The industries with an FSI over 100 indicate a greater relative concentration of Japan's outward FDI than average. In the EC, industries with an FSI over 100 were finance and insurance, and commerce in non-manufacturing, and only machinery in the manufacturing industries. In the US case, there are six manufacturing industries with FSI over 100.

### *Two-way FDI between the EC and Japan*

The three-way trade relationship among the US, the EC and Japan is characterized by imbalances. In 1989, Japan recorded a huge trade surplus with both the US and the EC, \$45 billion and \$29 billion respectively. Japan exports about twice as much to both the US and the EC as it imports from them. Meanwhile, merchandise trade between the US and the EC is almost balanced. The US accounts for 34 per cent of Japan's total exports and 22 per cent of its total imports, while the EC accounts for 18 per cent and 13 per cent respectively. Japan accounts for 12 per cent of US exports and 20 per cent of its imports, while the EC accounts for 24 per cent and 20 per cent respectively. For the EC, we get two different figures depending on whether trade within the EC, which accounts for 60-70 per cent of total exports and imports of the EC, is included or not. Including trade within the region, the US accounts for 8 per cent of exports and 7 per cent of imports, while Japan accounts for 2 per cent and 5 per cent respectively. Excluding it, the share of the US rises to 20 per cent in exports and 17 per cent in imports, while that of Japan is 5 per cent and 11 per cent respectively. Although the relationship between the EC and Japan has recently become more important, it is much weaker in terms of trade than that between the EC and the US and between

Table 1.10  
Total Japanese direct investment in the EC countries (1951-89)  
(\$ million)

	UK	Fr.	Sp.	Bel.	Neth.	Lux.	Ger.	Ire.	It.	Port.	Europe
Food	101	132	3	2	39		9	104	8	1	311
Textiles	36	107	49		125				19	322	489
Lumber & pulp					1		8				17
Chemicals	108	37	121	147	271		376	6	23	1	1,110
Iron, steel, nonferr. metals	69	67	62	25	72			21	3	1	395
Machinery	507	232	35	65	252	18	138	37	44	1	1,339
Electric/electronic	778	119	100	24	485	4	343	52	52	3	2,016
Transport equipment	454	52	564	32	151		24	25	62	9	1,352
Others	228	103	14	178	112		101	31	31	36	917
Manufacturing	2,281	848	949	472	1,510	21	998	193	242	74	7,947
Mining	850	57						17			1,416
Construction	32	8	5	1	17		21				84
Commerce	1,230	613	116	276	1,209	2	1,365	7	207	28	5,404
Finance & insurance	8,267	291	16	405	5,072	5,186	456	13	58	8	21,258
Services	426	296	185	22	994	17	79	325	18		2,487
Transportation	55	5	13	13	15	31	7				157
Real estate	1,695	487	58	5	1,200	22	21	4	30	2	3,669
Others	708	21	1	11	49	104	59	2	5		1,092
Non-manufacturing	12,413	1,717	380	733	8,556	5,359	2,007	350	318	38	34,115
Total	15,793	2,899	1,546	1,353	10,072	5,383	3,448	565	684	114	44,972

Note: \*The total includes real estate before 1980 and branches which cannot be classified by industry.

Source: Ministry of Finance, Japan

Table 1.11  
FSI of Japan's FDI to the EC and the US

	UK	Neth	Lux	Ger	Fr	Sp	Belg	Ire	It	Port	EC	(US)
Food	50	30		20	335	18	10	3	87	68	55	107
Textiles	18	99			293	252	1	1457	215	1545	88	43
Lumber & pulp	1		22	0	0				21	2	66	
Chemicals	20	79		320	3	230	318	1	99	34	76	100
Iron & steel/												
nonferrous metals	12	20		0	63	110	50	29	14	32	20	93
Machinery	126	98	13	156	313	88	187	144	251	18	123	118
Electric/electronic	85	83	1	172	71	112	30	114	132	41	80	142
Transport equipment	81	42		19	51	1027	68	257	228	91	109	
Others	41	32		83	101	26	373	127	130	896	56	158
Manufacturing	55	58	1	111	112	236	134	132	14	251	68	115
Agriculture & forestry	0	1	10	3	28	0			16	4	73	
Fisheries	0					20			97	6	2	55
Mining	90				33				51		37	21
Construction	25	21		74	32	35	5			42	24	117
Commerce	79	121	0	400	213	75	206	13	306	251	122	133
Finance & insurance	232	223	427	59	44	5	133	11	37	29	209	70
Services	29	107	3	25	111	130	18	624	29		61	122
Transportation	6	3	9	3	3	0	16		0		5	6
Real estate	78	87	3	4	123	28	3	5	32	15	62	169
Others	151	17	64	57	20		29	5	24	9	77	69
Non-manufacturing	117	118	139	81	85	34	75	91	65	48	109	95

Note: See page 21 for definition of FSI.

Source: Ministry of Finance, Japan

the US and Japan.

The cumulative total of Japanese investment in all sectors in the Community is only 40 per cent of Japanese FDI in the US. For manufacturing investment the EC is only one-fourth as important as the US. Considering that the Community's GNP is a little larger than that of the US and that EC imports from Japan are one-half those into the US, Japanese investment in the EC has traditionally been relatively small.

Although it is difficult to make international comparisons on FDI as we saw earlier, we will try to get a rough picture of the two-way FDI flow among the US, the EC and Japan. We will begin by examining the mutual penetration between the US and the EC and between the US and Japan based on the FDI statistics from the US Department of Commerce, which is the most reliable source because it includes reinvested earnings and offers detailed data by sector and by region.

According to the US Department of Commerce, the US and the EC penetrate each other in a well balanced ratio of 1 to 1.5 on a stock basis as of the end of 1989 and a ratio of 1 to 3 on a cumulative flow basis from 1987 to 1989. However excluding reinvested earnings, the ratio widens to 1 to 12 on a flow basis.

As for the mutual penetration between the US and Japan, the US statistics show that Japan penetrates further into the US with a ratio of 3.6 to 1 on a stock basis as of the end of 1989 and 11 to 1 on a cumulative flow basis from 1987 to 1989. Excluding reinvested earnings, the ratio widens to 84 to 1 on a flow basis.

Regarding FDI between the EC and Japan, the Japanese balance of payments statistics show that it is almost a one way flow from Japan to the EC; 35 to 1 from 1987 to 1989. Since the Japanese data do not include reinvested earnings, this might not give an accurate picture. Taking into consideration that Japan is a newcomer as an FDI investor, the relative importance of reinvestment earnings to Japan's outward FDI in the EC is small enough to be ignored. By contrast, regarding Japan's inward FDI from the EC, reinvested earnings might be relatively large. If reinvested earnings were proportional to the FDI stock, then the reinvested earnings of EC firms in Japan would amount to about one billion dollars at most. If reinvested earnings are included, the asymmetry of recent FDI flows between the EC and Japan narrows to 12 to 1 from 35 to 1.

To summarize, as for FDI flows among Japan, the US and EC, the ratio of mutual penetration narrows in each case if reinvested earnings are included. In both measurements, including reinvested earnings or not, FDI flows between the US and EC are well balanced. In the case of Japan, however, the asymmetry between outward and inward FDI is large both for the US and for the EC. This asymmetry will be discussed in detail in Chapter 5.



## Notes

- 1 The Group of Five or G-5 comprise the US, the UK, Japan, Germany, and France.
- 2 The Association of South East Asian Nations (ASEAN) includes Singapore, Malaysia, Indonesia, Thailand, the Philippines and Brunei.
- 3 All Japanese FDI figures from the Ministry of Finance are expressed on a fiscal year basis (ending on March 31 of the following year). All \$ symbols refer to US dollars.

## 2 Japanese manufacturing investment in the EC: motives and locations

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### Introduction

Japanese direct investment in the EC has increased at a remarkably fast pace since the mid 1980s. This growth of Japanese FDI has encompassed a wide range of industries and has gone into almost all countries within the EC to varying degrees. In this chapter we analyze the motives for Japanese manufacturers' European operations across a broad range of industries, and then we look at the factors determining the location of production within the EC. We refer to data from interviews conducted by the authors between October 1989 and February 1990 with managers of parent companies and European affiliates in a variety of leading firms and industries. The last section briefly touches upon the future prospects of Japanese manufacturing investment in the EC. The results of a questionnaire survey conducted in late 1989 by the Research Institute of the Eximbank are also cited to illustrate the behaviour of Japanese investors in other regions of the world.

### *Japanese FDI in the EC compared with in the US*

Japanese manufacturing investment in the EC manifests both similarities and differences with investment by Japanese manufacturers into the US (see Table 2.1). Total Japanese investment in the EC amounts to only 40 per cent of that in the US, or 25 per cent for just manufacturing. Considering that the GNP of the EC is slightly larger than that of the US and that EC imports from

Table 2.1  
Japanese investments in the EC and the US

Cumulative FDI 1951-89 (\$ billion)

	EC		US
Total	41.9	Total	104.4
Manufacturing	7.6	Manufacturing	31.4
Electrical/electronics	1.9	Electrical/electronic	8.6
Transport machinery	1.3	Other manufacturing	5.8
Industrial machinery	1.3	Transport machinery	4.0
Chemicals	0.8	Chemicals	3.5
Other manufacturing	1.1	Iron & nonferrous metals	3.5
Japanese manufacturing affiliates			
	Europe		North America
Employees (31.3.89)	94,000		215,000
Production bases (31.3.90)	501		1,043
Electrical/electronics	99		113
Televisions	13		13
Video tape recorders	21		5
Compact disc players	8		6
Stereos	6		0
Telephones	2		6
Facsimile machines	3		2
Computers	2		6
Copiers	8		3
Electronic components	46		53
Semiconductors	6		6
Automobiles			
Passenger cars			
Present	2 plants		8 plants
	100,000 units		1 million units
1992	700,000 units		over 2 million units
Components	30 plants		160 plants
Steel	1 joint venture for		11 joint ventures for
	for technical assistance		manufacturing sheets
			and galvanizing lines
Magnitude of economies (\$ billion)			
GNP (1989)	4,831.2		5,166.5
Imports from Japan (1989)	47.9		93.2
Exports (1988)	1,168.1		473.0
Population (1988)	325 million		246 million

Source: Ministry of Finance, JETRO

Japan are more than one half of the level of US imports from Japan, Japanese

investment in the EC is relatively small.

The number of Japanese production bases in the Community is less than half that in the US. The average dollar investment per affiliate is smaller in the EC, but the average number of employees is comparable: roughly 200 in each region. The electrical and electronic machinery sector has a similar number of production bases in both locations. Nevertheless, the Japanese presence for VTRs, compact disk (CD) players, stereos, and copiers is bigger in the Community than in the US in terms of number of establishments. On the other hand, Japan's investment share is smaller in the EC for telephones and personal computers, and for television sets and components including integrated circuits (ICs).

The Japanese presence in automobile manufacturing is much smaller in the Community, where two plants are now producing about 100,000 passenger cars each year, while eight plants manufacture about one million units in the US. In 1992, production in the EC will increase to 700,000 units, almost one-third of the expected production in the US. The number of production bases involved in automobile components and materials in the US is one-fifth that in the EC. There is only one steel plant owned by Japanese steel makers in the EC, while in the US six Japanese steel makers have invested in eleven projects producing mainly steel sheet and galvanized sheet.

With regard to parent companies, fewer large Japanese companies possess more than one production base in the Community than in the US. For Japanese small- and medium-sized enterprises (SMEs), overseas investment in Asia overwhelmingly outnumbers that in the EC. According to a study, SMEs made 724 investments worldwide in 1988, of which 475 were located in Asia, 185 in North America and 45 in the EC.

The market of Japanese affiliates in the EC is equally divided between the host country and the Community. Very rarely do imports go back to Japan. On the other hand, Japanese manufacturers in the US sell their products in the host country.

The above-mentioned features show that the EC is a relatively new market for Japanese investors. The small size of Japanese manufacturing investment in the EC is due to factors including: the managerial strategies of Japanese manufacturers, Japan's economic relationship with the EC (and with the US), the different market conditions and needs of local industries in the EC and the US, and the different investment climates and protectionism in the host countries.

## **Motivations**

Intangible assets constitute the basis of a successful MNE. Such a company can choose between normal arm's-length exporting and direct investment. Therefore, motives for local direct investment should be seen in the context



of these alternative strategies. From the empirical study, three motives can be determined in the case of Japanese manufacturing investment in Europe: globalization, countering trade friction, and the comparative advantage of local production.

### *Globalization*

First, Japanese corporations have tended to reduce various risks related to exporting from Japan by producing overseas close to consumers and clients. This tendency became apparent in the 1980s, particularly towards the end of the decade. Export transactions necessarily involve the use of different currencies, the imposition of customs duties on components and products, and transportation and communication across long distances. Over time, ways of foreign exchange hedging have been diversified, tariffs have been lowered, and transportation and communication technologies have developed in a spectacular way. Thus the walls surrounding national markets are being lowered, and marketing and production are being globalized. Nevertheless, Japanese corporations' management see foreign exchange risk and long-distance transportation costs as uncertain and large. This factor has spurred Japanese production overseas.

The Japanese yen is still little used in international transactions, and its range of fluctuation is relatively large as evidenced by the sharp appreciation between early 1985 and mid 1986. Facing reduced sales and profits due to the steep appreciation of yen, Japanese export-oriented companies are inclined to reduce export ratios and to increase overseas production in order to neutralize the influence of foreign exchange fluctuations. Most Japanese use a consolidated-basis accounting system for the operations of overseas subsidiaries and affiliates.

European countries are geographically and culturally distant from Japan. Shipping components and products is costly and takes a long time; uncertainty about delivery forces European affiliates (factory and sales offices) to maintain large stocks; and it is difficult to organize frequent on-the-spot exchanges of information on quality and taste among producers and consumers. This is the case with manufacturers of consumer products, such as electronics and automobiles, and, *inter alia*, makers of components and materials. Automobile manufacturers have recognized the need to adapt to local tastes and preferences in designing new products. Lack of standardization in some product categories makes local production necessary for a quick response to consumers' needs, especially for high-technology products such as personal computers and mobile telephones.

An increasing number of Japanese companies are now adopting global management strategies. They develop, produce and distribute in a global way, taking into consideration the different endowments and tastes of the US, the

EC and Asia. The good performance of their business and the relative ease of procurement of external resources have helped the move towards globalization. The Eximbank's survey revealed a steep increase in overseas production ratios for assembly-type industries from 10.2 per cent in 1986 to 12.9 per cent in 1988, and it predicted a further rise to 19.2 per cent for 1991. Of 242 respondent companies, ninety per cent considered globalization to be an important target of corporate management.

### *Countering trade friction*

Local production can also be viewed as a countermeasure by Japanese exporters to European protectionism. The increased investments registered in the 1980s in the electrical machinery, automobiles and industrial machinery sectors were, to varying degrees, motivated by this factor.

The Japanese trade surplus with the Community increased steadily in the late 1970s, reaching \$8 billion in 1980 and levelling off at \$10-11 billion in the first half of 1980s. It started to rise sharply in the late 1980s and reached \$19.8 billion in 1989. Faced with larger Japanese trade surpluses, the Europeans have adopted a variety of measures over the years to restrain Japanese imports into the EC. European protection against Japan began in 1968 when France and other countries started restricting the import of Japanese colour TV sets (CTVs). The EC as a whole began monitoring imports of Japanese automobiles, CTVs, VTRs, industrial machinery and so forth in 1981 and 1982. Japanese industry associations established guidelines for the export of CTVs to the UK and urged self-restraint in the export of such sensitive products. Moreover, since 1983 the EC Commission has initiated successive anti-dumping investigations regarding imports of a variety of Japanese products. Anti-dumping duties have been imposed on such products as miniature ball-bearings, hydraulic excavators, electronic typewriters, plain paper photocopiers, computer printers, and VTRs. Semiconductors, audio-cassettes and audio-cassette tapes have been under investigation. Microwave ovens and car telephones were investigated but dumping was not found.

In 1987, the EC Commission started to impose anti-dumping duties on products assembled by Japanese-owned plants in the EC if more than 60 per cent of the components were of Japanese origin, in order to prevent the circumvention of anti-dumping duties by Japanese assemblers. Electronic typewriters, photocopiers, computer printers and VTRs were targeted as can be seen in Table 2.2.

Regarding the country of origin the EC Commission adopted more stringent measures for ICs and photocopiers in 1989, although a criterion of more than 45 per cent of value added has been applied in the case of radios, TVs and tape recorders. France and Italy also raised objections to automobiles made

Table 2.2  
Representative cases of EC anti-dumping duties  
against Japanese firms as of September 1990

Product	initiation	decision	remarks
photocopier	August 1985	Feb. 1987	
photocopier*	Feb. 1987	Oct. 1988	
		Dec. 1988	cancellation
	May 1989	Feb. 1990	
VTR		Sept. 1987	March 1989
VTR*		July 1989	
Computer printer	May 1989	Jan. 1989	
Computer printer*	Dec. 1988	Sept. 1989	
		Nov. 1989	cancellation
Semiconductor			
(EPROM)	April 1987		
(DRAM)	July 1987		
CD player	July 1987	Jan. 1990	
Audio- and video- cassette tapes		Jan. 1989	
Hydraulic excavators	July 1984	July 1985	
Ball bearings	April 1984	June 1985	

Note: \* Shows anti-dumping against 'screwdriver' assembly plants

Source: MITI and others

in Nissan's UK plant being treated as European on the grounds that they had less than 80 per cent European content, although both countries eventually abandoned the effort to limit such imports.

Faced with the mounting trade imbalance vis-à-vis the Community and a series of restrictive measures aimed at Japanese exports, a large number of Japanese companies started to set up factories in EC member states. In the mid to late 1970s CTV manufacturers started overseas production, followed in the early 1980s by manufacturers of machine tools, VTRs, and semiconductors. Since the mid 1980s the number of photocopier, microwave and automobile factories has increased. In 1988 and 1989, an increasing number of manufacturers of electronic equipment and automobile components launched overseas operations, and new and large IC diffusion factories and car assembly plants were announced by major manufacturers.

The import restrictions, anti-dumping measures and rules of origin have their own proper purposes, but, in effect, they have prompted Japanese manufacturers to invest directly within the Community. Import quotas and



voluntary export restraints have held Japanese companies back from increasing their exports of manufactured goods. Competition with other Japanese companies has been another pressure.

Anti-dumping measures have not necessarily solely targeted Japanese companies. Between 1980 and 1988, 348 cases were initiated, and approximately forty-one per cent of them were against firms in the state trading countries. Japan accounted for eight per cent (twenty seven cases), which was almost equal to the Japanese share of EC imports. However, excessive anti-dumping duties surely weakened the price competitiveness of the Japanese products: those products' ex-factory prices in Japan tended to be calculated relatively high by the EC Commission. Besides, Japanese firms had to give so much time and effort to preparing their responses to investigations by the EC Commission that local production seemed a preferable alternative.

Neither anti-dumping measures on 'screwdriver' assembly plants nor strict and arbitrary interpretation of regulations on rules of origin aim specifically to force Japanese corporations to make inward investment. However, when local procurement of key components is difficult, Japanese manufacturers have to produce those components locally for themselves (for example, engines for automobiles) or ask local components makers to produce them. There are cases where they have to urge their Japanese subcontractors to produce locally or increase imports from their own subsidiaries in Asia. This is particularly the case with high technology products (VTRs and facsimile machines); since European makers seldom manufacture similar products and related components, Japanese components suppliers are also investing in the EC.

Table 2.3 shows that Japanese exports to the EC have been replaced by local production in several sectors. The export volume peaked in 1983 for CTVs, in 1982 for VTRs and in 1985 for photocopiers. Although this substitution is partly the result of product cycles, it was accelerated by protectionist measures.

#### *Advantages of local production: factor and market access*

Naturally, Japanese corporations also opt for local production in Europe on the grounds that it will increase sales and profits in the long term. Corporations give serious consideration to costs and benefits in judging whether to expand exports through domestic production or by starting local production overseas. Japanese companies often appreciate the advantages of production in the EC: some European countries provide cheap and plentiful raw materials (for example, chemicals and agricultural goods), relatively low labour costs or low energy costs. Tax incentives and investment subsidies also contribute to the attractiveness of the EC.

Many companies have been increasingly attracted by the future expansion of the European market. They have begun local production and have



Table 2.3  
Transition of Japanese exports to the EC  
(billion yen; [thousand units])

	1980	1985	1989	Estimated production by Japanese affiliates in the EC
Total exports	3766	4768	<u>6578</u>	
Machinery & equipment	2719	3784	<u>5352</u>	
Motor vehicles	605	722	<u>1152</u>	[100]
Passenger cars	[808]	[881]	<u>[1112]</u>	
Office machines	133	418	<u>727</u>	
Electronic & ADP machinery	[101]	[4675]	<u>[11964]</u>	
Scientific & optical Equipment	351	434	<u>501</u>	
Photocopiers	[271]	<u>[830]</u>	[536]	[650]
Semiconductors & electronic parts	98	197	<u>290</u>	
ICs	[46m]	[245m]	<u>[464m]</u>	
Tape Recorders	269	<u>550</u>	333	217
VTRs	[1320]	<u>[4946]</u>	[3252]	[3317] [5630]
TVs	<u>50</u>	34	38	
CTVs	[764]	<u>[831]</u>	[757]	[611] [3970]
Metal goods	<u>258</u>	129	151	
	<u>[632]</u>	[375]	[237]	

Note: Underlined numbers signify the peak year.

Source: Ministry of Finance, MITI.

reinforced sales and marketing capabilities in the expectation of an increase in local demand. The European economy has recovered since the mid 1980s. European countries are making efforts to harmonize policies in preparation for the unification of the Community by the end of 1992. European companies are adapting themselves to the new situation through mergers and acquisitions and by increasing new investments. The single European market will provide not only a once-and-for-all growth through deregulation, but also opportunities for successive innovation by private companies within the Community. Non-Community companies have also attempted to seize these opportunities. US, Swiss and northern European corporations have already made sizeable investments.

Japanese companies in general are very interested in the unification of the European market. They are watching with interest developments in the field of customs simplification, harmonization of norms, standards and taxes and,

in particular, the formulation of automobile policy at the Community level. A Keidanren survey of major Japanese firms (based on responses from 453 companies) examined their views on the influence of EC market unification on their businesses and their reactions to '1992'. Most companies expect the single market to expand the European economy and to promote European industrial recovery, with positive effects on their business. Some expect their business opportunities in the EC to expand. Others fear that more discriminatory treatment will apply to Japanese companies. They are concerned about such European policy decisions as the interpretation of rules of origin (i.e. *de facto* local content requirements), reciprocity and anti-dumping measures. In concrete terms, a large number of Japanese companies (174 non-finance companies) are expanding their factories or making new investments in the Community. They are also interested in mergers and acquisitions and in the establishment of regional headquarters. The surge of Japanese investment in 1988 and 1989 is apparently caused by growing expectations of 'a Europe without borders'.

### *Conclusion*

The three above-mentioned motivations are inter-independent. Accelerated globalization and defensive investment will not take place unless a particular investment project is basically justified in terms of profitability and feasibility. An equally important point is whether Japanese manufacturers will be accepted in the European market. Nor should the element of competition between local and foreign companies be neglected. There have been cases where Japanese companies established joint ventures with European firms and purchased ailing European companies in accordance with requests from their European clients.

The motivations vary considerably from sector to sector. Table 2.4 reclassifies the motives for FDI surveyed by JETRO (1990b) in late 1989 and early 1990 into the above-mentioned three groups. Motives related to globalization score high in all sectors. The comparative advantages of local production were also accorded high priority by both raw materials- and assembly-oriented industries. Assembly-oriented industries put equal weight on avoiding trade friction.

Table 2.4  
Motives for foreign investment by industrial sector

	Total	Assembly	Parts	Raw mat.	Others
<i>Globalization</i>	355	125	68	113	49
Globalization strategy	179	62	31	65	21
Minimizing foreign exchange risk	29	12	2	13	2
Meeting consumer needs	91	40	15	21	15
Servicing parent in Europe	11	3	3	1	4
Furnishing Japanese MNEs in Europe with material and parts	45	8	17	13	7
<i>Countering trade friction</i>	144	98	25	12	9
Avoiding import quota	48	36	7	3	2
Avoiding antidumping regulation	31	25	4	2	-
Avoiding 'screwdriver' anti- dumping regulation	20	9	6	2	3
Fear of anticipated protect- ionism from EC integration	45	28	8	5	4
<i>Comparative advantage of local production</i>	245	89	38	84	34
Securing cheap raw materials	7	1	-	4	2
Reducing production costs	34	7	6	15	6
Preferential tax status	44	14	9	16	5
Excellent European design	10	5	2	2	1
Conversion from export to local production	97	34	11	35	17
More economic advantage by Single Market	37	19	5	10	2
R & D in Europe	16	9	4	2	1
Others	29	5	10	11	3
Number of responses*	773	317	141	220	95

Note: \*Number of respondents: 270; multiple answers allowed

Source: JETRO (1990b), p. 96-7.

## Industry/firm case studies

### *Electronics and electrical machinery*

*Home electronics/electrical appliances* The history of investment in Europe by Japanese home electronics and electrical appliances manufacturers can best

be understood by reviewing how these firms secured their market shares in Europe, that is by switching from exports to local manufactures. The home electronics/electrical appliances industry was one of the first Japanese industries to establish itself in Europe after World War II. As early as 1968 Sony set up its Bridgend factory in South Wales to assemble CTVs, and in 1975 participated with a German electronics firm in a suburb of Stuttgart, which was later called Sony-Wega, to manufacture CTVs and audio products. Matsushita Electric followed Sony, establishing a dry cell plant in Belgium in 1970 and a CTV plant in Wales in 1974. With an international reputation for competitiveness, quality and price, these Japanese firms were proud of their high ratio of overseas sales. Furthermore, they had abundant experience of overseas investment, in particular in Southeast Asian countries and North America, before they began to invest in Europe.

Early investments by Japanese home electronic appliance industries were concentrated in CTV assembly factories in the United Kingdom. Apart from a number of greenfield investments and acquisitions in the latter half of the 1970s, Japanese firms also increased their participation in joint ventures for "industrial cooperation", rescuing inefficiently operated factories by introducing modern manufacturing processes and managerial techniques. Toshiba established such a joint venture with Rank and Hitachi with GEC. (The British companies later withdrew, owing to differences of opinion on management policies, so the ventures now exist as Japanese wholly-owned subsidiaries.) Including these two, there are currently thirteen Japanese CTV factories (eight in the UK, two in Germany and three in Spain) producing 21 per cent of all CTVs manufactured in Europe.

In 1982 the Japan Victor Company set up a tripartite joint venture with Thorn (UK) and Telefunken (Germany) in the United Kingdom and Germany to manufacture VTRs and their related goods and supplies. (Thomson of France subsequently took over Telefunken's share.) In the 1980s, production of VTRs by Japanese manufacturers flourished in Europe, followed by CD player and microwave oven production. Twenty-one Japanese manufacturers (eight in Germany, seven in the UK, three in France and three in Spain) produce VTRs, representing a 50 per cent share of all VTRs made in Europe.

Japanese electronics/electrical industries are now specialized in terms of both where and what they produce. They are large-scale manufacturers of goods using electronic components, particularly in the audio-visual fields, but do not produce home electrical appliances such as refrigerators or washing machines, or industrial electrical machinery. As for production bases, they have a strategic framework divided between Japan, Europe and the Asian NIEs. In general they import high value-added items from Japan, manufacture intermediate items locally in Europe and import low value-added items from the Asian NIEs. European manufacturers still maintain the lion's share of the local television set market, as European governments consider this a strategic



industry. Nevertheless, Japanese brands dominate new product lines using high-technology electronics, even in this sector. Overcoming the high barrier of local content rules, Japanese firms are increasing production in the EC countries. In order to feed their own markets for such high-technology products, European manufacturers are compelled to introduce manufacturing licences from Japan, rely on OEM-based imports, or establish joint ventures with Japanese manufacturers such as that of Bosch with Matsushita for VTRs and Thomson with Toshiba for microwave ovens.

*Sony and Toshiba: the first Japanese investors* Sony has manufacturing affiliates in six European countries. (The French affiliate has three factories.) Its policy is to spread production facilities as widely as possible, as they manufacture consumer goods which need to be widely known to the public. Sony commenced investment very early, aware of possible trade friction. It enthusiastically promotes 'global localization' in all respects: general managers of its European subsidiaries, including its European headquarters in Cologne, are all Europeans; it purchases its materials from the suppliers who offer the best terms; it exchanges products across borders; and it has set up a finance company in the Netherlands to raise funds for investments in Europe. Nevertheless, there is no local capital participation in these subsidiaries: it is Sony's policy to set up wholly-owned subsidiaries overseas because of the proprietary nature of its unique technology.

Toshiba began its investments in Europe somewhat later than Sony, beginning with the joint venture with Rank. It has six manufacturing companies producing a wide spectrum of merchandise from home electronics to computer and electronic devices. In contrast to Sony, Toshiba takes a generous attitude towards local participation. Three subsidiaries in Germany are wholly owned, but two in France are joint ventures. Originally, Toshiba's factories all produced a range of goods for their local market, but now each factory concentrates on one product line for the broader European market; thus the Plymouth factory concentrates on CTVs, the Moenchengladbach factory on VTRs and the Aizeney factory on microwave ovens. The first local production of Japanese lap-top computers has just begun at the Regensburg factory. In the short run Toshiba's main aim is to avoid trade problems, but these activities are 'investments in order to become a European insider, a Toshiba official said.

*Office machines* European manufacturers used to be strongly competitive in the world market for office machines, but they grew complacent and were slow to develop new-generation products and technologies. Photostatic copiers and other electronic office machines were thus typical subjects for trade friction between Japan and Europe in the 1980s. The EC Commission has initiated measures to contain a rapid increase in Japanese exports of copiers.

This contrasts sharply with the home appliance sector where EC countries had differentiated positions, and trade negotiations were conducted between the individual country and the relevant Japanese industry.

The first step taken by the EC Commission to safeguard against imports of Japanese office machines was the imposition of anti-dumping duties on electronic scales in 1984. Similar duties were subsequently imposed on electronic typewriters, photostatic copiers, printers and cellular radios. When Japanese exporters decided to manufacture such products locally, the EC Commission extended the duties to the components imported by the subsidiaries in cases where 40 per cent or more of the value of components was imported from the original dumping country. This strategy, designed to suppress 'screwdriver transplants', has been recently declared by a GATT panel to be in violation of GATT rules. The EC Commission contested the decision.

The next step was the interpretation of rules on the country of origin: in 1987 the EC came close to judging that photostatic copiers made in Ricoh's California plant were substantially products of Japan despite the fact that the US authorities had defined their origin as American.

As a preemptive measure, Japanese manufacturers are establishing manufacturing bases in Europe for products against which no complaints have yet been initiated, for example facsimile machines and lap-top personal computers.

Some manufacturers began local production in the 1970s: for example, Canon set up a photostatic copier factory in Giessen (Germany) as early as 1972. But the majority of transplants were established in the 1980s after trade problems became explicit. There are eight Japanese copier factories in Europe: one in the UK, three in France, three in Germany and one in Italy.

In contrast to home appliance makers, copier manufacturers have been able to establish wholly-owned subsidiaries. The three exceptions are Toshiba, which has a joint venture with Rhone Poulenc in France, and Canon and Sanyo (with Olivetti in Italy). Otherwise, few European companies have found it advantageous to cooperate with their Japanese competitors.

*Integrated circuits and other electronic components* Integrated circuits are essential components of such high-technology goods as home electronic appliances, office machines, telecommunications equipment and information equipment. European firms passed up the chance to develop and manufacture ICs; consequently they now lag far behind Japan and the US. As mentioned above, the Europeans have tried to overcome their weakness by applying country of origin rules against their Japanese competitors.

Many American IC makers built their own factories in Europe early on. Such comprehensive European electronics/electrical manufacturers as Philips, Thomson and Siemens followed the Americans into IC production, but they

specialized in custom-made ICs, particularly for telecommunications equipment and military devices. They are weak in multi-purpose products for home use. In Europe it is American and Japanese firms that have hegemony in this field. Since NEC established its subsidiary in Ireland as early as 1976, five Japanese IC manufacturers have begun operations in Europe: Toshiba and Hitachi in Germany, NEC and Fujitsu in Ireland, and NEC in the UK. NEC set up its Irish facility in 1976, and the remaining firms started production in the early 1980s. Moreover, Toshiba has granted a licence to Siemens to produce one Megabyte semiconductors. While NEC's factory in the United Kingdom handles both the diffusion (an early stage of IC manufacturing) and assembly stages, the other four still remain labour-intensive assembly plants. NEC says that it is the company's policy to invest when the market reaches a certain size, whatever the factory's product; it was granted some subsidies both in Ireland and the UK.

Japanese IC manufacturers were charged with dumping by the EC Commission in 1987. It had not responded earlier to requests from European manufacturers for a dumping charge, supposedly because it was waiting for local manufacturers to begin mass production, as Commission members feared that application of anti-dumping duties would only lead to a great influx of Japanese manufacturers to Europe as had happened in the case of office machinery. In 1989 the Commission, taking advantage of the ambiguity of the 'country of origin' rule, decided that when ICs are made in the EC by non-EC companies, the country of origin should be considered as the country in which the diffusion process takes place. As American IC manufacturers were conducting diffusion in their European plants, this ruling was without doubt directed at Japanese manufacturers.

Thus, products made at the four Japanese factories carrying out assembly operations only (one of the final stages of IC manufacturing) can no longer be described as 'Made in the EC'. This puts them at a great disadvantage on two counts: first, IC materials imported from Japan are subject to higher duties, as if they were imported as assembled ICs; and second, they risk losing customers who may prefer to purchase 'EC-made' ICs to satisfy local content rules. All of the firms concerned have recently announced investments in diffusion process facilities in the United Kingdom (NEC and Fujitsu), or Germany (Hitachi). In addition, Mitsubishi Electric, which hitherto had no IC production operations in Europe, has recently announced a plan of investment in IC manufacturing facilities including a diffusion process in Germany.

Trade friction is not the only motive for Japanese IC manufacturers to invest; the prospect of growing demand in Europe is also an important factor. Furthermore, they want to keep in touch with their customers to exchange technological information and collect data on general market trends.

Other electronic components industries have not experienced such overt problems as the IC manufacturers. They are increasing investments in Europe,



mainly because their customers have transplanted to Europe, or develop new markets. Proximity to their customers is an important motivation here. Japanese components makers have forty-eight production bases in Europe, seventeen of which are in the UK, ten in Germany, three in France and two in Spain. Few manufacturers have two or more factories in Europe, but Alps Electric has three subsidiaries, two of which are direct ones in the United Kingdom and Germany; another in Ireland is held through its US subsidiary.

### *Automobile assembly and related industries*

**Automobile assembly** Exports of Japanese automobiles to Europe have remained at about one million units for several years because some large market countries have imposed restrictions on these imports. Motives for investment by Japanese automobile firms focus on the need to find a way to penetrate this immense market.

Japanese automobile manufacturers whose European-affiliated plants have commenced commercial operations are: Nissan (UK and Spain), Toyota (Portugal), Isuzu (UK), and Suzuki (Spain). Toyota has its commercial vehicles assembled by Volkswagen in Hanover, Germany. Honda recently announced a 20 per cent capital participation in the Austin Rover Group (UK) to which it had granted technical assistance. Toyota has also decided to construct its own passenger car assembly and engine manufacturing plants in the UK. Suzuki has just signed a joint venture agreement to set up a small-car factory in Hungary, the first example of cooperation in automobile manufacturing with Eastern Europe.

Japanese automotive corporations began investments in Europe later than in North America, where all except Daihatsu have already commenced commercial operations. While subsidiaries manufacturing smaller passenger cars in North America are competing with the Big Three (GM, Ford and Chrysler), the bulk of Japanese local manufacturing in Europe, with the exception of UK Nissan, has hitherto been centred on commercial vehicles. This delay in establishing Japanese car assembly plants in Europe is attributed to the fact that Japanese car manufacturers specialize in the same product line as their European counterparts at FIAT, Peugeot, Renault, and Volkswagen: small passenger cars. Rather than compete with Europeans, they preferred to enter the US where they easily dominated the small car market.

Japanese manufacturers began their investments in peripheral countries of continental Europe where their modest commercial vehicle production attracted less attention and trade friction. Two such examples are Toyota's Salvador Caetano in Portugal and Nissan's Motor Iberica in Spain. These plants belong to the category of projects aimed at the domestic markets of developing countries where abundant cheap labour is available and a lot of protective measures are expected. Major Japanese automobile manufacturers



have much experience of this type of project. The later admission of Spain and Portugal to the EC enabled the two companies to exploit the market throughout Europe, particularly Nissan which developed Motor Iberica as one of its five main overseas plants.

The Japanese automobile industry depends on overseas markets for half of its sales volume. The US market absorbs 40 per cent of its exports while only 20 per cent are directed to Europe. Since the sales to the US have been limited to 2.3 million units per year by the 'voluntary export restriction' since the beginning of the 1980s, the importance of the European market has increased rapidly. Five European countries, however, are restricting imports of Japanese cars in several ways: Italy, Spain and Portugal are directly limiting import units by way of the EC's common regulation (Italy: 3,300 units; Spain: 1,200 units; Portugal: 10,000 units); France sets limits on the market share of Japanese cars (3 per cent) by administrative guidance to automobile dealers; and the UK restricts the market share of Japanese cars by a gentlemen's agreement between the manufacturers' associations of the two countries (11 per cent). In other European countries the market share of Japanese automobile manufacturers is very high, e.g. 43 per cent in Ireland, 32 per cent in Denmark, and even 15 per cent in Germany. In contrast, France and Italy, major car producers, are strongly opposed to Japanese car imports. They regard their automotive industries as strategic and will protect them at all costs. But they neither have confidence in their own ability to compete with the Japanese even in their main domestic markets nor do they wish to see their oligopolist position lost through an 'invasion' of Japanese cars. Consequently they accept neither imports nor inward investment from Japanese car manufacturers, as was recently demonstrated when Fuji Heavy Industries was forced to withdraw an investment project at Angers, France.

Although the UK is an automobile producer, the share of its national manufacturers in car production is low, and US-owned automotive subsidiaries in the United Kingdom have little interest in exporting, as their sister companies have established networks of local production throughout Europe. The UK has long been a net importer of automobiles. The country, with its declining domestic manufacturing industries, high rate of unemployment and deteriorating trade balance, has naturally been promoting investment by efficient Japanese car manufacturers in order to create jobs, stimulate the national economy and obtain foreign exchange. In due course Nissan, Honda and Toyota all decided to invest in the UK in response to inducements from Prime Minister Margaret Thatcher.

Germany is also a big car producer with national firms, Volkswagen/Audi, Daimler-Benz and BMW, as well as the US subsidiaries Ford and Opel. The German companies have a broad overseas market in contrast to French and Italian producers. The German Federal government, having an open trade policy, does not intervene in automobile trade problems. The domestic market

is open to imported cars because it is believed that protective measures would lead to retaliation against German producers, which rely heavily on the overseas market. US-owned automobile subsidiaries also have production bases in Germany, with about a 30 per cent share of domestic sales. Japanese car makers have no experience of direct investment in Germany, partly because of its openness to imports, and partly because of its high wage level. Recently Mazda announced its intention to assemble cars at Ford's Saarlouis plant, but it is not yet clear if this will mean the establishment of its own production line or the consignment of assembly on a commission basis.

This difference in the competitiveness of the motor industries of EC countries is the main reason why they have not been able to agree on a common automobile policy prior to 1992. A draft proposing that member countries abolish their own individual restrictions on the market share or units of Japanese cars in favour of a common EC-wide ceiling on the Japanese share up to a certain date is likely to be approved. Japanese manufacturers are alarmed by the recent proposal that EC-made Japanese cars (and third-country-made Japanese cars) should be included in this ceiling.

*Automotive related industries* Europe has a well-developed automotive components industry. A Motor Iberica official commented that components imported from Japan do not pay for themselves since the sharp appreciation of yen; also that Japanese automobile manufacturers are compelled to procure their components from local manufacturers in order to raise local content. Components suppliers are more independent of assemblers in Europe than in Japan. Japanese assemblers are often patriarchal parent companies of suppliers in Japan and they have had to think about their relations with local suppliers in Europe. They are endeavouring to establish long-term partnerships with suppliers, for example by way of the simultaneous engineering in design and development of components that is characteristic of Japanese supplier/customer relationship. But local suppliers often lack the technological and financial ability to respond to assemblers' requirements on cost, delivery and quality, according to a UK Nissan official. Thus Japanese components makers have found an opportunity to invest in Europe to supply their customers.

Overseas investments by components companies are not always connected with those of assemblers. In earlier times most Japanese manufacturers imported patents from European manufacturers. Major Japanese and European components manufacturers still have a close network of technological cooperation. Nippondenso and Calsonic, which are key subsidiaries and suppliers of Toyota and Nissan respectively but have more independent status, are making investments overseas on their own initiative. Nippondenso announced in 1989 that it would establish a joint venture company with French Valeo to manufacture special components called 'distributorless

ignition coils' in Spain, where Valeo has much experience in manufacturing. These products are not expected to be supplied to UK Toyota or to Salvador Caetano. IMI, an exhaust system manufacturer which Nippondenso recently acquired, has for the time being no products to supply to Toyota's local subsidiaries. Calsonic's local subsidiaries, TI-Nihon in the UK and in the Netherlands, do not supply all their products (exhaust systems) to Nissan's plants. It is noteworthy that these investments take the form either of acquisitions of existing enterprises or of joint ventures, in order to avoid unnecessary friction with local components suppliers.

The tyre and tube manufacturing industry is typically global and oligopolistic, and technically and financially independent of the automotive industry. Sumitomo Rubber made its overseas investments in a unique manner by acquiring three European factories from its parent, Dunlop, which, having had a 40 per cent share in Sumitomo, requested it to take over its overseas subsidiaries in Europe and the US because of poor management. Sumitomo was motivated to accept Dunlop's proposal, which gave it the opportunity to acquire the immediate status of a worldwide enterprise. The four factories were revitalized through improvements in the working environment, renewal of production lines, raising worker morale and so on. Bridgestone, another Japanese giant, having acquired US Firestone and is on the way to becoming a global enterprise by purchasing Firestone's European subsidiaries.

Major Japanese steel companies and local steel mills in the US established joint ventures to supply automotive industries with galvanized steel plates. In Europe, by contrast, they are active in providing patents to steel companies without actually participating in those companies. The European steel mills are not as inefficient as the American ones and, with the exception of those in Germany, are more or less under state control, with the exception of those in Germany. In the future Japanese steel companies may be forced into more active involvement in Europe through minority or majority shareholdings or joint ventures, though to a lesser extent than in the US.

### *Others*

*Construction machinery* Two Japanese companies have production bases in Europe: Hitachi Construction Machinery in Italy and the Netherlands, and Komatsu in the UK. As in earlier periods, almost all Japanese construction machinery firms were granted licences by European manufacturers. Serious trade problems were caused by an influx of Japanese products to the licensee countries in the 1980s. In 1984 an anti-dumping process against Japanese construction machinery was initiated and it was declared in 1985 that the Japanese were guilty of dumping. Anti-dumping duties were imposed on small type oil-hydraulic shovels for the next five years. On the basis of its unique technology, in 1968 Hitachi C.M. the joint venture Fiat-Hitachi with Fiat-



Geotech, a major Italian construction machinery manufacturer, to cope with such problems. Hitachi C. M. also set up a joint venture with John Deere in the United States in 1988 to establish a tripartite worldwide network of production bases. Komatsu's British plant at Telford, launched in 1986, should also be understood in the same context.

Hitachi's subsidiary in the Netherlands was set up for the contingent reason that it had to take over a bankrupt import agent to continue after-sales services for customers. But this is now a good assembly base situated in northern Europe, in addition to Fiat-Hitachi in southern Europe.

*Chemical and textile industries* In contrast to the aforementioned industries, European chemical companies, particularly those of Germany, Switzerland and the UK, which have penetrated the Japanese market to a significant extent, remain the most competitive in the world. However, Japanese chemicals industries are finding it possible to invest in the market of their strongest competitors, as there are as yet unexploited opportunities for their own specific assets. According to JETRO's inquiry there were seventy-three Japanese chemical factories throughout Europe in 1989, of which fourteen were in France, ten in the UK and seven in the Netherlands. No trade problems have occurred in this sector.

In 1974 Ajinomoto, which has its own excellent amino-acid technology, constructed at Amiens in France a factory manufacturing feed lysines with its French counterpart, Orsan. The new firm was called Eurolysine. This Franco-Japanese cooperation became so successful that a firm called 'Heartland Lysine' could be established in the US. Throughout the world Ajinomoto now has four factories specializing in the same product. Eurolysine has been indispensable for Ajinomoto in being a multinational lysine provider. In 1989 Ajinomoto acquired Omnicem, a fine-chemicals factory in Belgium, a further element in Ajinomoto's development as a comprehensive worldwide chemical manufacturer.

Kao, a chemical giant in Japan, is manufacturing a wide range of products from intermediate chemicals to cosmetics and home use chemicals in Europe: surface activators, computer diskettes and toner for photostatic copiers at the Barcelona plant, toner at Kao Perfecta, Berlin; bodycare and haircare goods at Guhl Ikebana, Berlin; and fragrances in France and Spain. It has laboratories in Barcelona, Paris and Düsseldorf. It acquired Goldwell, a manufacturer of haircare products for professional use, in 1989. The chemical industry, including the toiletry and cosmetics industry, is now in an era of worldwide restructuring. Kao's development in Europe can be understood in the context of its worldwide strategy.

Overseas investment by Japanese pharmaceutical firms has just started. (Yamanouchi set up its manufacturing subsidiary in Ireland in 1988.) Some observers are concerned about this Japanese 'invasion', although Japan



remains a net importer of pharmaceutical products and technology. Even Takeda Chemical, one of the world's top ten pharmaceutical companies, has no production base in Europe. It has an R&D centre in Germany, which is no more than a liaison office with supervisory authorities and clinical test organizations in each respective country. Some drugs developed by Takeda are produced on a consignment basis by local manufacturers and distributed via joint venture sales companies in Europe.

Toray is a multinational chemical firm producing synthetic textiles. It has been developing mass-production factories in Southeast Asia to manufacture fibres for garments. In Europe it is known for its speciality products: artificial leather in Italy and carbon fibre in France. Toray acquired a polyester filament factory near London which had been abandoned by Courtaulds, and was successful in its renewal. This is a meaningful model of M&A for both parties.

## **The location of Japanese-affiliated factories**

### *Country distribution*

Japanese manufacturers owned 529 production bases in Western Europe as of January 1990. The UK was in first place with 132 companies, followed by France with 95, Germany with 89, Spain with 55, the Netherlands with 34 and Italy with 28. Statistics prepared by the Tokyo Office of DATAR (Délégation à l'Aménagement du Territoire et à l'Action Régionale) show similar results. Since 1986 the number of affiliates has grown chiefly in the UK, France and Germany. Japanese manufacturers have established not only production bases but also a variety of affiliates for sales, financing, regional administration, information collection, product development and so forth. According to the Eximbank survey, 247 major Japanese manufacturers had 206 manufacturing affiliates, 466 sales affiliates and 127 other types of affiliates (almost half for financial services) in the EC in March 1989. Investments in non-manufacturing sectors are noteworthy as they support manufacturing operations.

The UK is the biggest host country for electrical machinery, automobiles and office equipment (see Table 2.5). Food manufacturers tend to be numerous in France, general machinery in Germany, and chemicals in the Netherlands.

### *Regional distribution*

In which regions of host countries are Japanese-affiliated factories located? In the UK, South Wales and Scotland are the main locations, while the West

Table 2.5  
Country and Sectoral Distribution of Japanese  
Manufacturing Industries in Europe  
(number of affiliates)

	Total	UK	F	Ger	NL	B-L	IRL	Sp	I
Total	529	132	95	89	34	27	22	55	28
Food	21	3	15	1	1	-	-	1	-
Textiles	8	3	-	-	-	1	1	1	-
Textile products	7	-	3	2	2	-	-	-	2
Furniture	4	-	2	1	1	-	-	1	-
Pulp & paper	4	1	-	-	-	-	-	-	1
Chemicals	83	11	11	9	10	6	4	11	8
Pharmaceuticals	14	-	3	4	-	1	2	3	1
Rubber products	18	1	4	4	2	1	-	3	-
Ceramics	13	2	2	2	1	4	1	1	-
Steel	5	-	-	-	1	1	-	-	-
Nonferrous metals	14	5	5	-	-	-	1	2	1
Metal products	20	7	2	2	1	-	-	3	1
General machinery	66	16	14	16	6	2	-	8	3
Electronics & electrical machinery	86	25	18	19	3	2	6	7	6
Electronics parts	53	20	4	14	2	4	5	2	1
Transport eqpt.	14	4	2	-	-	1	-	5	2
Transport eqpt. parts	24	14	1	1	2	0	0	2	2
Precision mach.	22	4	3	7	2	1	1	-	-
Others	53	16	6	6	3	4	1	5	3
Design centre, R&D centre	73	24	11	14	3	4	1	11	3

Source: JETRO (1990), p. 7.

Midlands, Yorkshire and Humberside have recently attracted more facilities. Japanese companies are geographically dispersed in France, but a relatively large number of companies are established in the Ile de France, the departments in the northeast which are traditional industrial zones, Aquitaine, and in Rhone-Alps. In Germany, North Rhine-Westphalia, Hesse and Bavaria were the main host regions. In Spain, Japanese factories were concentrated in Catalonia.

Japanese companies seem to have set up relatively many factories in the assisted areas in the UK and in the equivalent areas in France where investors are eligible for governmental aid. EC member governments have provided foreign investors with investment grants and employment subsidies in order to promote regional development of the declining industrial areas and under-

developed regions. Training and research and development grants are also available.

New productive investments are now booming in the Community countries. Their locations have shifted from traditional industrial zones (textiles, machinery, steel) located in the North to new industrial sites in the South where high technology factories and business service are abundant; for example, the western crescent of London and the southeast for the UK, and the southern provinces in France. This tendency is not well reflected in the location of Japanese establishments. Instead, a larger number of Japanese companies have opted to invest in the industrially declining areas.

### *Motivations for the location of investment*

*Host country's industrial and inward investment policies* Worried about Britain's declining manufacturing industries, the Prime Minister Margaret Thatcher developed extensive policies for revitalizing industry and for weakening the hegemony of the trade unions. Inducements for foreign investment under her regime should be understood in this context. Japanese industries were not always welcomed by the British people in the 1970s, as Japan was the old enemy in the World War II. Having visited many factories in Japan before her appointment, the Prime Minister perceived early that Japanese industries have excellent manufacturing technology and management style. The UK government endeavoured to attract such strategic or high-technology industries as electronics and automotives to the UK. When granting incentives it is very common for industrial policies to lay down exhaustive conditions such as joint ventures or a certain level of local content and value added, but the British Government's requirements are modestly limited to job creation and fostering of related industries. The liberal attitude of the British government has contributed to the strong appeal of the UK as a production base for Japanese industries. These policies remain in effect.

German industries are in general very competitive. The Federal Government is proud of its traditional social market economy and does not have any special programme to induce foreign investors, entrusting it to the Länder and to local communities. All eleven west German Länder Governments, including West-Berlin, have representatives in Japan to attract industries. Influential journals such as *Der Spiegel* sometimes inflame antagonism towards Japanese industries, but the people are very open to foreign investment. The French position toward inward foreign investment, particularly from non-EC members, has often been ambiguous. As early as the 1960s the *défi américain* was initially repulsed under President de Gaulle's regime. The French Government is currently ambivalent towards Japanese industrial penetration. On the one hand French statesmen and bureaucrats recognize the success of British industrial revitalization policies and are cognizant of the role played



by foreign investors. On the other hand they have misgivings about a Japanese thrust in specific industries as evidenced during the 'Poitiers War' in 1982 when all imported VCRs were made to clear customs formalities at Poitiers, an inland city inconvenient for business activities. Moreover, the French have been hostile to Japanese investments in such traditional enterprises as wineries, first-class restaurants and to the acquisition of national monuments. The press, including *Le nouvel économiste* often inflames such sentiments. French entrepreneurs, in particular those of less competitive industries, are apt to demand protection against foreign competitors. In fact, the French government sometimes screens foreign investments or intervenes on their plant site selection. For example, Fuji Heavy Industry's project to set up an automotive factory at Angers reportedly had to be given up in early 1989 because of the opposition of the French Government. This dirigiste structure has made some prospective Japanese investors dubious of France as an investment site. But a score of years was necessary even for American investments to be perceived as naturalised in Europe. Japanese firms have been in France for less than a decade. Investments which create jobs or which introduce new technologies are welcomed by local communities. Bretagne and Alsace are especially eager to attract foreign investments and have representative offices in Tokyo.

In general the attitude of the national government and local authorities is one of the key factors in determining where to locate a prospective foreign investment. According to the 1989 JETRO survey, the share of Japanese manufacturing subsidiaries (including acquisitions) which are wholly-owned are 82 per cent in the United Kingdom, 78 per cent in Germany, 88 per cent in the Netherlands, 71 per cent in Belgium, 52 per cent in France, 33 per cent in Spain, and 33 per cent in Italy. These data, together with those on the number of production bases in each country, suggest the importance of industrial and foreign investment policies in host countries and indicate the attractiveness of various locations for Japanese investors.

*Incentives* In the UK, both the central government and local communities are aggressive in providing incentives for investors. Assisted areas are classified into three categories: Northern Ireland, development areas and intermediate areas. Investment subsidies are granted accordingly, and employment subsidies are also available. Many Japanese enterprises, including Nissan, Toshiba and Ricoh, have taken advantage of those subsidies. In contrast, Toyota reportedly declined such grants.

In Germany Länder Governments are endeavouring to create jobs in local communities by granting direct subsidies to investors and by providing the industrial infrastructure. This is particularly true in areas where traditional industries such as mining and shipbuilding are concentrated and previously in depopulated areas near the borders with the former German Democratic



Republic and Czechoslovakia. Two Japanese semiconductor factories, Toshiba at Brunswick and Hitachi at Landshut near to the Eastern border, received subsidies at the time of establishment.

This is the case also in France, where 60 per cent of the country was divided into two categories of development area. Ajinomoto's Eurolysine at Amiens in Picardie was granted employment subsidies at its foundation. Ricoh at Colmar in Alsace did not enjoy such incentives, but had roads around the factory prepared by the local government.

In addition to employment and investment subsidies there are several kinds of fiscal incentives, such as accelerated depreciation under tax laws and low interest loans. These kinds of aid will be increasingly reduced and harmonised among the EC member countries.

*Preference of major countries* The EC Commission has been successful in inducing investment from a wide range of Japanese industries from office machines to semiconductors, VCRs and microwave ovens by applying anti-dumping duties, local content rules and so on. National governments have so far preferred to keep Japanese automobile imports and local production under their effective control. This interplay between national and regional policies is another factor influencing where Japanese manufacturers choose to invest among the four major countries, namely the UK, France, Germany and Italy. France is deemed to be particularly influential within the EC Commission by Japanese manufacturers and is at the same time well known for its unyielding and aggressive attitude towards Japanese activities in Europe. An employee for a Japanese copier manufacturer said that the company had established its second EC manufacturing base in France partly because it could expect to avail itself of French political influence on EC countries in case of need and partly to gain the understanding and sympathy of France for its operations in Europe.

Cars made by Nissan's British factory were endowed by the UK Government with the status of 'EC-made cars' because their local content reached a level of 70 per cent. France and Italy were compelled to allow imports of cars from Nissan's Sunderland factory, though reluctantly, after hard negotiation within the Community. Prime Minister Thatcher's helpful intervention in this matter proved that Nissan's plant site decision was the right one.

Some electronics manufacturers, in particular those of home electronic appliances, have intentionally restricted their plant sites to the three major countries in order to keep their high-quality brand images. For example, Toshiba has distributed its transplants among the three countries: CTVs to the UK, VCRs to Germany, and microwave ovens to France. Such a division of labour is a natural course for manufacturers whose higher-end products rely

on local manufacturing and imports from Japan and whose lower-end products come from the Asian NIEs.

Alps Electric said that when it opened its second European factory in Germany its customers were very happy that they could now procure in Germany and not from the UK where Alps located its first European transplant; they believed in the German technological tradition.

*Gaining popularity and familiarity among customers* Sony, whose overseas sales ratio is as high as 70 per cent, has eight factories in six European countries (the UK, Germany, France, Italy, Spain, Austria). It is spreading its production network as widely as possible. For a multinational consumer goods firm like Sony it is necessary to win a favourable market perception. According to Sony officials, European countries have no important differences among themselves as to the advantages of production factors. Rather, Sony directs efforts to gaining popularity and familiarity among customers. The scattering of transplants is one such technique, as is the quotation of its equities on local stock markets.

*Geographical proximity to markets* Little problem is found with transportation in EC countries where many countries are accessible by road in one day or less. Cost and time of transportation are minor issues for those who have markets all over Europe. But geographical proximity remains an important factor for those investors who aim at a national or local market or at specific customers.

Alps and Hitachi said that it was advantageous for them to locate near their customers, not to reduce transportation costs, but for an exchange of detailed technical information in the case of custom-made products. As in the case of automotive components manufacturers, their clients require 'just in time' delivery, and hence geographical proximity is an important factor. UK Nissan prepared plant sites near its factory for its subcontractors who would follow Nissan's investment.

*Infrastructure* While such social infrastructure as transportation and communications is a prerequisite to any industrial investment, some industries require a specific industrial infrastructure. For example, Hitachi was very happy to locate at Landshut, where the frequency of power, a vital factor to manufacture semiconductors, is very stable.

*Manufacturing manpower* Assembly industries such as the automobile and electronics sectors require an abundant supply of labour. Some Japanese producers have located factories at sites with abundant labour from industrial restructuring and where employment subsidies can be expected. Some firms have chosen their plant sites far from existing industrial zones as they prefer

to employ a fresh workforce not accustomed to traditional industrial relationships.

The search for abundant cheap labour is characteristic of investments in developing countries. Although some companies benefit from lower wages in the UK, Spain and in other countries, the existence of abundant labour is no longer a vital factor in site selection within the EC. Most investors have recently come to require stable, skilled and flexible labour, even if wages are somewhat expensive because the Japanese system of production requires a flexible labour force capable of thinking of 'total quality control'.

*Manpower capable of research and development* For reasons of both political pressure and commercial necessity, Japanese firms are beginning to establish R&D facilities in Europe. Some in the EC have suggested that the costs of research and development should be included in manufacturing costs when calculating the local content or local value-added of transplant production. Moreover, without local R&D personnel who are acquainted with local tastes it is difficult to develop products which are suitable for the local market. Japanese investors are increasingly localizing certain product design and development stages. The availability of highly skilled labour has therefore become another factor in determining the location of production. Kao Corporation in Spain, UK Nissan, UK Dunlop and Eurolysine have all established laboratories or research institutes. Motor Iberica and UK Nissan are constantly exchanging technical information with the parent company in Japan and with other overseas laboratories via satellite. They are to develop their own car and truck models which are appropriate for local driving conditions. For example, Nissan's Primera, will be developed in Europe and exported to Japan in the future. Models of home electronic appliances not only vary in style but must also be adapted to national technical standards. Without local development staff it would be impossible to cope with such a variety of models.

Toshiba's Regensburg lap-top computer plant and Hitachi's Landshut IC factory were established in the 'Silicon Valley' of Bavaria, where, the investors expected, development staff could be relatively easily recruited. When Sumitomo Rubber acquired UK Dunlop, the latter's research institute was one attraction. The importance of development overseas will increase hereafter, because manpower for research and development is limited in Japan.

*Language* Most Japanese firms investing in Europe consider the UK as the first site for their transplants. According to the Eximbank's survey mentioned earlier, 30 per cent of enterprises that will establish manufacturing bases in Europe will choose the UK. One of the reasons for this may be easily imagined: English is the almost only foreign language in which most Japanese can communicate with foreigners. In addition, most concepts in electronics,



which develop very quickly, are originally written in English, and most fundamental products have been invented in the US. An official at Hitachi Semiconductor stated that technical terminology cannot be translated into other languages.

Although the official corporate language may be English, Japanese managers have to speak daily in German (Hitachi). Directives and instructions given to local workers have to be made in French (Ricoh). Exceptionally, Sony designates the local language as the official one in every factory; in Dunlop France only French is spoken.

Sony's service centre is located in Belgium and its trade company in the Netherlands because the countries are centrally located in Europe, and because the employees have a very good command of several languages.

*Existence of partners or factories to be acquired* Locational issues and motives change significantly if the investment involves a local partner. The investor looks at the partner's all-around managerial resources such as technology, financial assets and personnel in addition to where the partner is located. Ajinomoto chose Orsan as its partner because of Orsan's technological level, and Nippondenso established a joint venture with Valeo in Spain because this French partner had a good deal of experience in factory operation in Spain. In the case of acquisition, the investor must look first at whether the facility conforms to the firm's needs. Location is a part of both of these evaluations, but it carries less weight than in greenfield investment.

## **Future prospects**

### *Views and expectations of host countries*

In spite of rapid growth in recent years, the Japanese presence in Europe is still small. In the UK, the largest host country for Japanese companies in Europe, Japan accounted for only 3.5 per cent of the total stock of inward investment at the end of 1987. Nevertheless, the share of annual flows has been higher in recent years: statistics from the Investment in Britain Bureau show that Japanese companies made approximately 10 per cent of the total number of investment decisions in the UK from 1986 to 1988. Japan stands in third place as a home country, following the US and West Germany. Although foreign-owned corporations represented less than 2 per cent of British manufacturing establishments, they accounted for 14 per cent of British employment and 18.8 per cent of net output in 1985. Among them, Japanese manufacturers still have a very small overall presence, although the Japanese role is larger in certain sectors such as electronics.



The annual flows of Japanese direct investment into West Germany have been, in most years, smaller than those into the Netherlands and Switzerland. Japanese direct investment has recently accounted for only 3-4 per cent of all foreign investment in France and 2-5 per cent in Spain.

Since 1989 there has been a sharp increase in cross-border mergers and acquisitions in Europe. Japanese companies were involved as buyers in approximately 3 per cent of total transactions amounting to 45.3 billion ECUs in 1989. The US was the largest acquiring country, representing 30 per cent of the total amount, followed by France, Germany and the UK. It is noteworthy that, in recent years, European countries have emerged as the largest investors in these Continental countries and that they have made bigger investments than the US in the UK, the leading host country of US investment.

European governments have basically welcomed foreign investment, either inward or outward, and moved towards liberalizing their investment regimes. The French government relaxed regulations on foreign capital participation in existing companies in January 1990. All European governments expect foreign investment to contribute to the local economy in many respects, notably in the creation or safeguarding of employment. Japanese manufacturers feel that they have met the demands of host governments in this regard. National governments (for example, the UK and France) and provincial governments have established a large number of investment promotion offices in Japan. They are often interested in the promotion of regional development and the reconversion of declining or backward areas. The British government expressed the hope that Japanese companies would introduce new industrial relations practices and transfer their manufacturing philosophy and technology to their British counterparts. Single unions, equal status within the workforce, just-in-time procurement and total quality control have been put into practice by Japanese-owned companies in the electrical machinery and automobiles sectors and have often been emulated by European, particularly British and French, companies. Some countries count on Japanese companies to introduce high technology and increase exports.

On the other hand, some voices in EC advise caution towards foreign direct investment. There is concern over potential pressures on host industries, particularly from excess productive capacity and stiffer competition from Japanese companies. Thus, some countries are inclined to limit inward investment in what they consider their strategic sectors (e.g. automobiles). Japanese companies have been sensitive to such anxiety and to possible countermeasures, so they have been careful to acquire, or associate themselves with, local companies whenever possible to avoid any unnecessary increase in production capacity. Although there was some unfavourable coverage in the press in recent months of Japanese companies' export and investment

behaviour, direct investment by Japanese companies is generally appreciated and more or less welcomed in the Community.

### *Future directions*

Will Japanese direct investment in the Community increase in the future? Will it meet the expectations of host countries, or will it grow so fast as to bring problems? These questions are difficult to answer, but reconsidering the three motivations discussed earlier will help us to form a perspective on likely future directions.

First, Japanese companies are moving towards globalization. An increasing number of companies envisage global operations centred on three major regions: Asia, the US and the EC. Although the US and Asia are the two main locations for Japanese companies, the significance of Europe will increase. According to the study by the Eximbank, 109 manufacturing companies out of 218 planned new or expanded investments in the Community for FY 1989 and FY 1991 (see Table 2.6). Almost the same number of Japanese firms planned to invest in Europe as in the US, according to the survey. The electrical machinery, automotive, industrial machinery, chemical and pharmaceutical products, and precision machinery sectors are areas where companies are willing to increase their investments. As the EC takes a larger share of Japanese exports, and the European economy assumes a larger weight in the global economy, Japanese companies will increase local production, distribution and development. Major companies are transferring manufacturing and sales functions as well as product development and design to their affiliates in the Community. They also intend to increase the ratio of locally procured components.

Second, trade friction between Japan and the Community will decline in importance as a driving force in Japanese investment. Currently, the Japanese government and industry are concerned about the protectionist aspect of the EC's common automotive policy, now under discussion. Nevertheless, in general, the trade relationship between the two parties has improved as the European economy has recovered and the EC trade deficit with Japan has narrowed.

The anti-dumping issue seems to have passed its peak; most major products have been investigated or taxed, and the EC's excessive use of anti-dumping measures has been criticized. In many sectors, Japanese companies have already preempted or accommodated to such moves by starting local production. In the future, existing overseas capacity will be expanded and more firms will set up new investments.

Third, the advantages associated with local production in the Community will not always be clear. They will be dependent upon the future economic management of the Community and the development of managerial

Table 2.6  
New plans for overseas direct investment for 1990-1991  
[Envisaged plan by industry/geographical region]

	NIEs	ASEAN	US	EC	Others	Effective Respondents
Food	4	7	7	6	4	11
Fibres, textiles	0	5	2	2	1	7
Lumber, wood products	0	1	0	0	0	1
Pulp, paper	0	2	3	2	1	5
Chemicals	13	15	18	14	3	30
(Pharmaceuticals)	(2)	(1)	(2)	(3)	(2)	(6)
Petroleum, rubber	1	2	5	4	2	6
Ceramics	1	2	3	2	2	5
Steel	0	2	5	1	1	5
Nonferrous Metals	2	7	6	2	2	7
Metal Products	1	3	2	3	0	7
Machinery	4	7	15	17	2	27
Electrical	8	22	12	22	9	38
(Assembly)	(6)	(10)	(7)	(11)	(3)	(15)
(Parts)	(2)	(12)	(5)	(11)	(6)	(23)
Transport equipment	5	15	19	32	3	35
Cars	5	14	18	29	3	31
(Assembly)	(1)	(6)	(3)	(7)	(2)	(10)
(Parts)	(4)	(8)	(15)	(13)	(1)	(21)
Precision Equipment	6	4	5	9	3	12
Printing	0	0	1	1	1	1
Engineering	0	0	0	1	0	1
All Ind. Groups	45	94	103	109	34	198

Source: The Export-Import Bank of Japan



capabilities by investing Japanese firms.

Will the performance of EC economies continue to be strong? The completion of the single market is now under way and progress towards economic and monetary union has accelerated recently. The liberalization and the democratization of Eastern Europe and the strengthened association of EFTA and other neighbouring countries with the EC will provide the potential for higher growth in a greater Europe. The European economy has recorded some improvements in macroeconomic performance. Nevertheless, many structural problems still remain unresolved. Germany has a current account surplus, while the UK and Spain suffer from chronic deficits. High unemployment persists in most countries, even Germany, and several countries have large budget deficits. Most EC member countries have benefited recently from stable currencies and low inflation rates under the European Monetary System. However, the monetary union between East and West Germany has aroused concern about the future stability of the Deutschmark, the central currency of the EMS, and the containment of inflation. Inflexible labour relations and insufficient vocational training and technological education are often perceptible in some European countries.

The performance of Japanese affiliates in Europe is relatively good; approximately 60 per cent are now profitable and consider their business successful while affiliates that have recently started operations are in the red, according to the recent JETRO (1990b) survey. In general, they face problems with the employment and training of local managers and engineers and fierce business competition in the region. There are often complaints about strict regulations and frequent interference by government officials. Japanese companies should make substantial efforts to localize further the management of their European operations, and to make those operations more self-reliant.

In conclusion, Japanese manufacturing investment in the Community will increase in the future at a steady pace. From defensive countermeasures to trade friction, the motivations will generally shift to more positive EC market-oriented and global management strategies. At the same time, the scale and depth of Japanese investment in the EC will remain limited compared with that in the US on account of several factors: the lower volume of trade between Japan and the EC; the different competitiveness of EC industries, particularly automobiles and steel; different business cultures and philosophy; and the protectionist behaviour, either implicit or explicit, of some European governments and industries. None the less, Japanese manufacturing investment will exert a far-reaching influence on the European economy. Japanese companies are expected to localize their European operations so as to contribute more to European society.



# 3 The impact of FDI on Japan's trade balance with the EC

KAZUYUKI MATSUMOTO

## Introduction

In this chapter we measure the impact of Japanese direct investment in the EC on the Japan's trade balance. Our analysis focuses only on changes in Japan's trade balance, though by estimating a vector of the direct-impact trade balance it becomes possible to measure other effects such as the indirect impact on the level of domestic production or the level of employment. In the first section we examine the relationship between merchandise trade by product and direct investment in the manufacturing sector by industry.

Though motives for FDI are diverse, they are roughly classified into two groups. One is cost-based FDI which flows from advanced nations to developing nations. The other is market-based FDI which takes place among advanced countries. Japanese FDI into the EC is, in general, undertaken to secure markets in the EC and to avoid trade friction and trade barriers. Such investment is not undertaken because production costs in Europe are lower than in Japan.

This is one of the most important reasons why the amount of FDI has a positive relationship with the volume of exports to the area. Thus, we can form a rough idea of the expected trend in Japanese FDI to the EC from current Japanese exports to the EC. The rest of the chapter measures the direct impact of FDI on the trade balance expected by 1995. We also compare our results with the effects that US direct investment has had on US trade.

## Japanese trade and foreign direct investment

Foreign direct investment between advanced countries is largely market-oriented. For instance, the largest share of Japan's FDI has gone to the US, where wages are about the same level as in Japan (see data in Chapters 1 and 2). In the case of the automobile industry, which has the second largest amount of Japanese FDI in the US, the main motive has been to raise the market share beyond the ceiling imposed by VERs which limit annual exports of passenger cars to the US to 2.3 million units.

With respect to Japanese FDI in the EC, many companies have stated that they are motivated to shift production to the EC in response to the completion of the single market in 1992, even if such FDI projects are not initially profitable (see survey responses in Chapter 2). For these reasons, recent Japanese FDI to advanced countries can be generally considered as a substitute for future, and sometimes even present, exports. Through questionnaires and interviews with manufacturing companies, we know that many FDI projects involving overseas production are intended to replace exports. Therefore, Japanese market-oriented FDI should not be expected so much in countries which do not purchase Japanese exports and where Japanese companies have little market information about customers' tastes. Furthermore, it takes many years to establish distribution systems for commodities in foreign markets.

In this section we examine whether FDI has a close statistical relationship with exports. By comparing Table 3.1<sup>1</sup> with Table 1.10, we can roughly see that the scale of FDI in the EC is larger for the industries in which Japanese exports to the EC are larger. Let us take the weight of exports and cumulative FDI of each industry to total industry. To smooth out yearly variations of flow data, we use averages of exports for 1987 and 1988. Cumulative FDI data are for the end of FY 1988 (i.e. the end of March 1989). The industrial classification here is that used by the Ministry of Finance in its notification-basis FDI data which are only compiled in large industry groupings.

To establish statistically the relationship between FDI and exports, we apply a simple regression in the form,

$$Y = a + bX$$

where Y is the percentage distribution of cumulative FDI by industry and X is the percentage distribution of exports by industry. We get the following results (t-statistics in parentheses) :

$$\begin{aligned} \text{(a) To the world:} \quad & Y = 3.77 + 0.55 X \\ & (1.71) (3.76) \\ & R^2 = 0.6528 \end{aligned}$$

$$\begin{aligned}
 \text{(b) To the EC:} \quad Y &= 3.12 + 0.77 X \\
 &\quad (1.54) (6.09) \\
 R^2 &= 0.8376
 \end{aligned}$$

These results confirm our hypothesis that there is a positive relationship between Japanese exports and FDI to the EC although we cannot draw general conclusions from these two cases only. The parameter for exports is larger and statistically more significant for the EC than for the world as a whole. One of the reasons that the degree of fit ( $R^2$ ) is smaller for the world than for the EC is probably because FDI to the world has many different motives. For instance, FDI to developing countries is more cost-oriented than market-oriented, so it may be more correlated with domestic production costs and imports than with exports.

We would expect to see a similar relationship between Japanese FDI and exports to the US which is the largest host country for Japanese FDI though inspection of the data reveals that transport machinery is an outlier. Statistically we obtain the following weak correlation between the two sets of data, though the parameter for export shares is statistically significant:

$$\begin{aligned}
 \text{(c) To the US:} \quad Y &= -1.39 + 1.26 X \\
 &\quad (-0.223) (2.49) \\
 R^2 &= 0.4253
 \end{aligned}$$

The reason why the share of FDI in transport machinery is larger than that of exports is simple. Because Japanese exports of automobiles and parts to the US amounted to \$28 billion in 1989, 30 per cent of total Japanese exports to the US, and because US exports of Japanese assembled passenger cars is restricted to 2.3 million units by VERs, Japanese firms have been rapidly constructing automobile plants in North America to substitute for exports.

By excluding transport machinery we get a better correlation between the two data sets:

$$\begin{aligned}
 \text{(d) To the US} \quad Y &= 4.03 + 0.74 X \\
 \text{(excl. trans. eqpt)} &\quad (2.23) (4.98) \\
 R^2 &= 0.7989
 \end{aligned}$$

We could also test such relations in time series, but then we face the problem of fluctuating exchange rates. Due to the large adjustment of exchange rates after the Plaza Accord, the relative movement of exports and FDI in time series is very much affected by currency conversion.

The significant positive relationship between FDI and exports which we have measured only means that FDI tends to concentrate in the export-oriented industries. As noted earlier, since Japanese FDI to advanced countries

is market-oriented, we can interpret this statistical relationship as implying that recent Japanese FDI projects in those countries are intended largely to substitute for its exports. The issue of whether Japanese FDI is a substitute for present or future exports will be discussed later.

## **The direct impact of FDI on the trade balance**

### *Method of estimation*

Our estimation procedure is outlined in the flow chart in Figure 3.1. Logically, the first step is to estimate the amount of production or sales of the foreign affiliates established or expanded by a given amount of foreign direct investment.

When a Japanese parent company undertakes FDI, the liabilities,  $L$ , of its foreign affiliate increase by the same amount, but we do not know how much the productive equipment,  $K$ , of the foreign affiliate will also increase. Even if we could obtain the data about capital stock  $K$ , we still have to determine the amount of production or sales,  $Y$ , by estimating or assuming some capital coefficients. After we have obtained the vector  $Y$ , we can go to the next stage of the estimation procedure outlined in Figure 3.1. In the actual estimation procedure, however, we do not derive  $Y$  from a production function. This is because necessary data for determining a production function cannot be obtained from historical data. We will, instead, make use of MITI's survey data.

We take the sales amounts of different industries from MITI's survey. After calculating all the various individual effects of FDI, we will derive an aggregate effect for all Japanese foreign affiliates. We assume that the coverage of MITI's survey is roughly 70 per cent of the activities (sales, capital formation, etc.) of all the Japanese foreign affiliates. In this way, we can avoid estimating the amount of sales from the amount of capital stock and so on.

Now let us consider the estimation procedures shown in the flow chart of Figure 3.1. First, we estimate the expected sales of foreign affiliates by industry in 1995 on MITI's survey basis. Then we measure effects 1 and 2. Effect 1 (export substitution effect) and 2 (reverse import effect) are the effects of producing abroad. Effect 1 is the amount of sales shipped to the host country or a third country. The size of effect 1 can be measured in two ways. One is to measure it by assuming that all production by the foreign affiliates substitutes for exports from Japan. The other way, that we actually take in this chapter is to adopt the survey data on parent companies' strategies. That is, not all of their foreign production will be assigned to



replacing their exports from Japan. Some of their foreign production will find new markets.

Therefore, we will estimate effect 1 (the amount of decrease of Japanese exports to the host country) as total sales of foreign affiliates multiplied by export substitution ratios by industry. For more careful calculation, we should take some conversions into consideration, such as those from export prices (FOB) to domestic sales prices of foreign affiliates (CIF). But in our estimates, we neglect such conversions because we only need to obtain the rough magnitude of the various effects.

Effect 2, or the amount of increase in Japanese imports from Japanese foreign affiliates (sometimes called 'reverse imports'), can be obtained in the same way. Effect 2 can be regarded as the decrease in Japan's net exports.

Effect 3 is given by the amount of intermediate goods (parts and materials) exported from Japan and used in the production of final goods by foreign affiliates. In many cases of foreign production, intermediate goods are supplied by the home country, partly because economies of scale can be obtained by the mass production of such intermediate goods at home factories rather than small-scale production by each foreign production site. Alternatively, high-quality intermediate goods may not be available in the host countries. To estimate effect 3 we will multiply the following three figures: the amount of sales of foreign affiliates, the ratio of input values of intermediate goods to final sales, and the ratio of Japanese supplies to total intermediate supplies. Such estimates are done by industry and then aggregated.

Effect 4 is very different in nature from the above three. Effects 1 to 3 occur after the completion of facilities related to FDI, but effect 4 occurs during the construction period in which foreign affiliates purchase capital goods from Japan. To calculate effect 4 we have to know what kind of capital goods or which industry's products are demanded for fixed capital formation in other industries. We can obtain this information from input-output tables for the Japanese economy. Since our purpose is to measure the amount of capital goods purchased from Japan by Europe-based subsidiaries, we assume that the composition of capital goods required by those subsidiaries is the same as that required by Japanese domestic industries at home. Then, we multiply the input-output ratios by the proportion of capital purchased from Japan to derive the amount of Japanese exports of capital goods for each industry. Our presumption here is that the structure of fixed-capital formation remains fairly stable, or that the present and future structure will remain the same. This assumption is required for the practical reason that Japanese input-output tables are made every five years and we do not have official forecast tables for 1995.

Effect 5 is the amount of imports by host countries from Japan induced by the expansion of aggregate demand in the host country as a result of Japanese

FDI. The expansion of the host economy should result in a net increase of imports in the short run. However, since this indirect effect is very difficult to identify, we will neglect it in this chapter.

After estimating the direct effects 1 to 4 for each industry and aggregating them, we need to undertake two additional tasks. The first task is to multiply the results by the ratio of Japanese ownership or voting shares of the foreign affiliates. For instance, if a foreign affiliate with 50 per cent Japanese ownership imports goods worth \$10 million from Japan, we only count \$5 million as the effect of Japanese FDI. The reason for doing this is because even a foreign company with no Japanese ownership may want to buy inputs of Japanese origin. Therefore, not all foreign demand for Japanese goods can be attributed to Japanese ownership. To take into account this problem, we multiply the sum of direct effects 1 to 4 by the Japanese ownership ratio for each industry to extract the portion of demand for Japanese goods brought about by Japanese FDI. The second task is to divide the obtained result by the aforementioned coverage of MITI's survey to extend the results to all the foreign affiliates.

### *The estimated direct impact of FDI*

Although the main purpose of this chapter is to estimate the impact of Japanese FDI in the EC, we will also measure the impact of Japanese FDI in all areas in order to establish the worldwide context. To measure effects 1 and 2, we first have to determine the size of sales of foreign affiliates in 1988 and the expected size in 1995. We start with MITI's survey data on sales of foreign affiliates for 1988. The survey covers roughly 70 per cent of sales of all Japanese foreign affiliates.

With respect to the determinants of the rate of increase in foreign production of Japanese affiliates, we do not have much information except on the growth rate of FDI stock in the MITI survey. We simply assume here that the rates of increase of capital stock and production are equal, implying that the capital coefficients will stay constant during the period. Forecasts of sales to 1995 of foreign affiliates according to MITI's survey are listed as Case 2 in Table 3.2.

Growth rates of FDI stock expressed in MITI's survey are the targets that companies want to realize as part of their corporate strategies. But if we take such intended Japanese FDI for 1995 at face value, it appears too large both for the EC and for all other countries. This exaggeration could be the result of a fallacy of composition for the following reason. If we suppose that the total of Japanese FDI stock of all the manufacturing industries in all host countries grows at the same rate (15.9 per cent annually) as expressed in company targets in the survey, then the Japanese FDI flow in 1995 will amount to \$84 billion. There are at least three reasons to think that company targets are overvalued.

First, because Japanese companies have over-reacted to the sharp rise of the yen after the Plaza Accord, they are likely to moderate their target rate of increase of FDI as they learn to adapt to the high yen rate. Second, host countries like the US and the EC will not necessarily welcome an influx of Japanese investment. Third, many Japanese companies which want to invest in the EC are trying to do so before the end of 1992. Therefore, the recent boom in FDI will probably weaken considerably after the completion of the EC's internal market. For these reasons it is likely that Japanese FDI will not increase as much as the surveys indicate, even if it remains at a high level.

Since the theoretical identification of the exact determinants of FDI and the empirical measurement of FDI functions are quite difficult, we are not in a position to make proper econometric forecasts of FDI. We will simply assume that half the rate of increase expressed in the survey is more appropriate. The assumed rates of increase in sales or capital stock are between 8 per cent and 9 per cent per annum. Forecasts of sales to 1995 using these rates are listed as Case 1 in Table 3.2. The Japanese FDI stock is expected to grow fastest in general machinery and electrical machinery. In Case 1, sales by Japanese manufacturing foreign affiliates in the EC will grow to about \$40 billion in 1995 compared with \$22 billion in 1988. Half of that amount will comprise sales of electrical machinery while the share of transport machinery will be 15 per cent and of precision machinery 12 per cent.

MITI's survey data show the percentage of sales by foreign affiliates which go back to Japan (see Table 3.3). Effect 1 (reverse imports) can be obtained by multiplying total sales of foreign affiliates by the percentage sold back to Japan. Table 3.4 shows the results. In most industries the percentages of sales back to Japan from the EC are small (ranging from 0.4 per cent to 6.0 per cent; the manufacturing average was 1.3 per cent for 1988), reflecting the company strategy whereby FDI projects are used mainly to open up new markets in the EC. In contrast, Japan's FDI to Asian countries has been cost-based, so a fairly large volume of finished goods is exported back to Japan (the manufacturing average was 15.1 per cent for Asian countries and 12.5 per cent for ASEAN in 1988). Examples include textiles and clothing in Asian countries, an aluminium project in Indonesia, and low technology electrical appliances in many countries in Southeast Asia. This is why reverse import effects are larger in total Japanese FDI than in FDI in the EC.

To measure effect 2 (export substitution), we first calculate the amount of affiliates' sales that will be sold in host countries and then we multiply such sales by the 'export substitution ratios' obtained from MITI's survey (shown in Table 3.5). That is, the decrease in exports by surveyed companies to host countries is divided by the sales of Japanese foreign affiliates there. We have such survey data by industry but not by host country, so that the same ratio is used for both the EC and all host countries for each industry. Estimated figures for effect 2 are listed in Table 3.6.



According to the MITI survey these ratios are about 40 per cent to 50 per cent in many industries. This may indicate that companies expect their production only partially to replace their exports from Japan and to find new markets in the host countries. Or it may indicate that FDI is executed mostly in the areas where they think they can open a new market of adequate size. Export substitution ratios might be larger than companies have planned if they are not successful in developing new markets. If foreign affiliates have to secure some minimum production levels in host countries, say for obtaining economies of scale, exports from Japan will have to be reduced when new markets cannot absorb all of the output produced abroad.

To measure effect 3 we first calculate the total consumption of intermediate goods by the affiliates. Table 3.7 shows the survey data of the ratios of intermediate goods to total sales by industry of the affiliates. Then, we use Table 3.8 with the percentages of intermediate goods purchased from Japan. Thus we finally obtain the figures for effect 3 as shown in Table 3.9.

According to Table 3.7, the percentages purchased from Japan in 1995 will be smaller for the EC than for the world in every industry except textiles and iron and steel. In the case of textiles, this is probably because production costs of input materials such as cloth are much lower in Japan than in the EC. In the case of iron and steel, it is chiefly because a Japanese manufacturing affiliate in Greece (which is one of only four Japanese foreign affiliates of iron and steel in the EC) is more like a trading company importing iron and steel from Japan. Therefore, those percentages may decline sharply in the long run if other Japanese companies and components suppliers enter the EC market. In a moderate-growth scenario (Case 1), the percentage of intermediate goods purchased from Japan by subsidiaries will decline from 52 per cent in 1988 to 33 per cent in 1995 for the EC, and from 53 per cent to 35 per cent for the world.

Table 3.9 shows that electrical machinery will account for about half of Japanese exports of intermediate goods to manufacturing foreign affiliates. Transport machinery and precision machinery have smaller shares. In 1988 exports of intermediate goods to the EC were \$7.8 billion (the total was \$46.8 billion). They represented about 17 per cent (18 per cent) of total Japanese exports. In a moderate-growth scenario (Case 1), by 1995 they will amount to \$9.5 billion to the EC and \$56.5 billion to the world. Purchases of Japanese components are expected to decline because many companies are trying to raise their local content to meet various requirements imposed by host countries. But the speed of localization will largely depend on how quickly components industries develop near the sites of Japanese subsidiaries.

For the estimation of effect 4 we need to know the amount of fixed investment of foreign affiliates. Again, we make the following two assumptions. The first is that the coverage of the MITI survey is about 50 per cent of the notification-based MOF statistics. This is because about 70 per



cent of planned FDI (on MOF's notification basis) is realized on average as shown in actual FDI from balance of payments statistics. Moreover, MITI's survey covers about 70 per cent of all the FDI (i.e.  $70\% \times 70\% = 50\%$ ).

The second assumption is that all Japanese FDI is spent on equipping foreign affiliates. We ignore, for instance, that actual fixed-capital formation can exceed the amount of FDI when foreign affiliates raise funds in host areas.

With the above assumptions, the estimated amount of FDI for 1988 and 1995 should be equal to the amount of fixed investment for the same years. From the cumulative FDI data we can calculate the flows of FDI (assumed to be equal to the fixed capital formation) for 1988 and 1995, with the annual rate of growth as shown in Table 3.2.

If capital,  $K_t$ , is equal to cumulative FDI at the end of period  $t$  and the annual rate of growth of  $K_t$  is  $r$ , then:

$$\text{FDI flow in 1995} = r(1+r)^7 \times K_{1988}$$

We can also derive an estimate for FDI in 1988. Thus,

$$\text{FDI flow in 1988} = r/(1+r) \times K_{1988}, \text{ because}$$

$$K_{1988} = (1+r) \times K_{1987} \text{ and } \text{FDI}_{1988} = K_{1988} - K_{1987}$$

Actual FDI may fluctuate annually, but using the above, we have more stable figures for FDI which can be considered to be more appropriate for estimation of its impact. Table 2-11 shows the calculated FDI multiplied by 50 per cent.

By calculating the weight of each activity in the private fixed capital matrix and using the FDI data in Table 3.11, we can obtain the amount of capital goods required. This is shown in Table 3.12. We multiply these figures by the ratios of Japanese supply of capital goods in Table 3.13, and finally we obtain effect 4 in Table 3.14. The obtained effect is much smaller than effects 1 to 3.

Table 3.15 shows the total of the estimated results for effects 1 to 4. We multiply these figures by the ratios of Japanese ownership by industry ranging from 56 per cent to 96 per cent shown by Table 3.16 obtained from the MITI survey. Here we suppose that the ratios are the same for 1995 as 1988.

Table 3.17 shows the predicted direct impact of FDI on Japan's trade balance. The direct impact on the trade balance with the EC will be the largest in electrical machinery which will account for more than half of the change in total manufacturing. General machinery and precision machinery will show the second largest changes. But FDI in iron and steel and textiles will have a positive effect on the Japanese trade balance because Japanese

affiliates in these industries are expected to import a large volume of intermediate goods from Japan.

The total direct impact for all affiliates is obtained by dividing those figures by 0.7 which is the coverage ratio of MITI's survey. The results are shown in Table 3.18.

Let us summarize the direct impact of Japanese FDI from 1988 to 1995 on the Japanese trade balance. Regarding FDI to the EC, in Case 1 which corresponds to a moderate growth rate of FDI of 8 per cent to 9 per cent per annum, the direct impact is a reduction of the trade account surplus by \$7.8 billion in 1995 (\$1.1 billion per year during the seven-year period) from the baseline which will be explained shortly. And in Case 2, which is unrealistic as explained earlier since it corresponds to a high growth rate of FDI of 16 per cent, Japan's external surplus will decline by \$16 billion in 1995 (\$2.3 billion per year) from the baseline. Concerning FDI to all areas, in Case 1 the direct impact is a reduction of the Japanese trade surplus by \$34.6 billion (\$5 billion per year), and in Case 2, \$65.6 billion (\$9.4 billion per year).

### *The baseline*

These results may appear to be quite large in terms of absolute size, but they are the effect of FDI compared with a baseline where no FDI is undertaken. In the baseline case, the Japanese trade balance may increase in absolute scale and world trade may also expand in absolute scale. More precisely, our baseline is based on the assumption that all of Japan's FDI would be replaced by long-term portfolio investment, so that no FDI would be carried out between 1988 and 1995. FDI and portfolio investment may have different effects on economic variables such as exchange rates and interest rates. However, such effects are ignored because of the lack of a more generalized model and because manufacturing FDI accounts for only 0.3 per cent of GNP.

Compared with the present level of Japan's trade surplus, the estimated impact of FDI may appear to be quite large. However, as mentioned above, the figures are the differences from a baseline, not from the present level of trade balance. A decrease in the trade balance in the future from the present level can be smaller, simply because the world economy and world trade are expected to keep on expanding. In the technical terms of economic modelling, the estimated numbers are the differences in the trade balance between the simulation case in which only the exogenous variable of FDI is changed and a baseline case in which no FDI takes place between 1988 and 1995. Therefore, the estimated absolute levels of the trade balance in 1995 themselves do not have much meaning. What is significant is the difference from the baseline.

Figure 3.2 can help us to understand this point. Point *A* in the figure is the actual Japanese trade balance in 1988. Point *B* is a baseline trade balance in

1995 if no FDI occurred during the period. Point  $B'$  is the future level of the trade balance when FDI is carried out during the period 1988-95, as assumed in our Cases 1 and 2. Our estimate of the impact of Japanese FDI corresponds to the difference,  $B - B'$ , but not  $A' - B'$ . Without knowing the level of  $B$  we cannot tell whether  $B'$  is smaller than  $A$  or  $A'$ .

To obtain a rough idea of the magnitude of  $B$  or that of the future trade balance in 1995, we assume that, if there is no FDI between 1988 and 1995, the ratio of the trade balance to nominal GNP will remain unchanged at 2.2 per cent in 1995, as it was in 1990. We also assume that the annual average growth rate of Japanese nominal GNP will be 5.5 per cent. Under these assumptions, the level of  $B$  would be about \$100 billion in 1995 as compared to \$62 billion per annum in the first half of 1990 (at the assumed future exchange rate of 120 yen per dollar). Thus,  $B'$ , namely the absolute scale of the trade surplus in 1995, would be \$65 billion (100 minus 35) or 1.4 per cent of 1995 nominal GNP. In this case, the absolute level of the Japanese trade balance in 1995 would be smaller than \$77 billion in 1989, but still higher than \$62 billion (annual rate) in the first half of 1990.

## The impact of US direct investment

The US is the largest exporting country and has the largest share of outward FDI in the world (see Chapter 1). By examining American FDI we hope to derive useful insights on the development of Japan's FDI in the future.

The US has the International Investment and Trade in Services Survey Act which obliges US nationals to answer surveys conducted by the Department of Commerce about foreign direct investment, operations of foreign affiliates and so on. Because the US data concerning FDI are quite reliable, we could use them to check the estimate made in the previous section of the impact of Japanese FDI.

Table 3.19 shows the direct investment position by industry of all the US affiliates abroad. We find that US FDI is concentrated in chemicals and non-electrical machinery. Much of the latter is in the computer industry. By area, Europe had attracted about half of that FDI by the end of 1988 and developed countries as a whole about 75 per cent. Therefore, US FDI, too, is mostly market-oriented.

In the US surveys, American corporations are classified into three groups depending on the degrees of disclosure of the data concerned. Therefore, the published statistics also have three parts. The first is on total investment, the second is on non-bank foreign affiliates of non-bank US parents and the third part is on majority-owned non-bank foreign affiliates of non-bank US parents. We will mainly use the last group of data to examine the operations of US foreign affiliates.



Operations of non-bank foreign affiliates in recent years are shown in Table 3.20. Total sales of US manufacturing affiliates were \$271 billion in 1982 and \$464 billion in 1988. Their wages to employees were \$57 and \$74 billion respectively in these years.

Although we do not have much information about how the trade balance was affected by US direct investment, let us assume that the decrease in the US trade balance induced by its FDI corresponds to about 20 per cent of the sales of all the manufacturing foreign affiliates. This is the figure that was estimated for Japan. Given this assumption, the deterioration of the US trade balance would have amounted to \$54 billion in 1982 and \$93 billion in 1988. The latter figure is even larger than the estimated Japanese Case 2 figure of \$80 billion in 1995.

The US has been suffering from a large trade deficit since 1983, especially in manufactured goods. In other words, in the 1960s and the 1970s it had to keep expanding its exports of domestic products to offset the negative effects on exports caused by the shift to foreign production as a result of its FDI. The US has also maintained a trade surplus with its foreign affiliates by supplying intermediate and capital goods to them. Of course, the sudden worsening of the US trade balance after 1983 should not be attributed to its FDI. Rather, it was both because its international competitiveness weakened due to the strong dollar and because US domestic production capacity could not meet the sudden increase in demand induced by the fiscal policy of the Reagan Administration.

Table 3.21 shows sales by foreign affiliates and direct investment in 1982. We can use these figures to calculate the capital requirements per unit of output of US affiliates. The derived ratio for all manufacturing is 4.0 for affiliates in Europe and 3.5 for affiliates in all countries. The corresponding figure for Japan is 4.6 in the EC and 2.7 in all countries. Therefore, the magnitude of the estimated sales for Japanese foreign affiliates can be considered to be within a reasonable range. These comparisons between Japan and the US suggest that the estimated trade effects in the previous section are also within a reasonable range.

## Conclusion

In the case of moderate (8-9 per cent per annum) FDI growth, we estimate that Japan's direct investment will result in a decrease in overall export earnings of \$48.5 billion in 1995 from the baseline. We obtain this figure by including in our calculations pre-1988 FDI. If we consider only post-1988 FDI the expected decline in export earnings is \$34.6 billion in 1995. Japan's bilateral trade balance with the EC would decline by \$10.2 billion dollars in 1995 or \$7.8 billion from the baseline, depending on whether or not pre-1988



FDI is taken into account. We can conclude that Japan's FDI will essentially substitute for its future, rather than its present, exports.

We have to emphasize once more that our estimates of the possible impact of Japanese FDI on the bilateral trade balance between the EC and Japan have nothing to do with any perceived importance on our part of bilateral trade balances. Our estimates are simply intended to indicate the order of magnitude in comparison with the general impact of all FDI in manufacturing on Japan's overall trade balance. It should be clearly kept in mind that what does matter is not the bilateral but the overall balance of a nation.

## Notes

- 1 All tables in Chapter 3 are presented at the end of the chapter.

Table 3.1  
Japanese exports to the EC  
(\$ million)

	1985	1986	1987	1988	1989
Foodstuffs	75	120	152	149	149
Textiles	479	736	779	826	826
Chemicals	984	1,395	1,793	2,270	2,390
Metal goods	564	738	723	958	1,096
Iron & Steel	239	327	241	291	373
General machinery	3,840	6,330	8,055	10,756	11,200
Office machines	1,816	3,124	4,054	5,288	5,277
ADPM*	1,094	2,080	2,839	3,550	3,467
Other machinery	347	535	591	722	897
Electric machinery	5,865	8,186	9,749	13,040	13,149
Visual apparatus	1,529	1,749	1,891	2,856	2,682
VTR	1,035	1,026	954	1,181	1,017
TV cameras	307	507	725	1,460	1,388
Audio apparatus	1,308	1,863	1,940	2,123	2,011
Telecom. appar.	236	501	954	1,660	1,596
Transport machin.	4,673	7,168	9,571	10,639	10,681
Motor vehicles	3,111	5,225	6,944	8,496	8,436
Motor veh. parts	554	831	1,210	1,011	1,010
Precision instr.	2,095	2,890	3,226	3,828	3,921
Copying apparatus	697	748	717	733	723
Watches	231	301	261	319	280
Total	20,216	30,675	37,693	46,873	47,908

Note: \*ADPM is Automatic Data Processing Machinery

Source: Ministry of Finance

Table 3.2  
Estimated sales of foreign affiliates  
(\$ million)

	EC						All areas					
	1988			1995			1988			1995		
	amount	case 1 amount	annual rate (%)	amount	case 2 amount	annual rate (%)	amount	case 1 amount	annual rate (%)	amount	case 2 amount	annual rate (%)
Textiles	91	120	3.8	150		7.5	4,130	5,430	4.0	7,030		7.9
Chemicals	778	1,240	6.9	1,920		13.8	9,030	15,380	7.9	25,060		15.7
Iron, steel, non-ferrous metal	716	820	1.9	930		3.8	8,050	11,560	5.3	16,190		10.5
General mach.	43	60	3.8	70		7.5	3,020	4,510	5.9	6,550		11.7
Electric mach.	2,014	4,150	10.9	8,010		21.8	8,290	15,650	9.5	27,850		18.9
Transport mach.	9,187	19,440	11.3	38,030		22.5	48,170	93,870	10.0	172,600		20.0
Precision mach.	3,565	6,430	8.8	11,020		17.5	28,430	45,650	7.0	71,140		14.0
Other manuf.	2,905	5,240	8.8	8,980		17.5	7,970	14,100	8.5	23,770		16.9
	2,237	2,480	1.5	2,750		3.0	15,410	18,440	2.6	21,680		5.0
Total	21,536	39,980	9.2	71,860		18.8	132,500	224,590	7.8	371,870		15.9

Source: MITI

Table 3.3  
Sales of European subsidiaries back to Japan  
(per cent)

	EC		All areas	
	1988	1995	1988	1995
Textiles	6.0	6.0	15.0	15.0
Chemicals	1.1	1.4	11.1	13.1
Iron & Steel	2.3	2.3	3.3	4.5
Non-ferrous metal	1.0	3.0	21.3	24.2
General machinery	0.8	2.1	6.4	10.4
Electrical machinery	1.7	4.3	7.0	10.6
Transport machinery	0.4	2.3	2.5	5.0
Precision machinery	3.3	8.3	6.5	13.0
Other manufacturing	3.8	4.0	15.7	16.0
Total	1.3	...	7.1	...

Table 3.4  
Estimated increase in Japanese imports  
(\$ million)

	EC			All areas		
	1988	1995		1988	1995	
		Case 1	Case 2		Case 1	Case 2
Textiles	5	7	9	620	810	1,050
Chemicals	9	17	27	1,000	2,010	3,280
Iron & Steel	16	19	21	270	520	730
Non-ferrous metal	0	2	2	640	1,090	1,590
General machinery	16	87	168	530	1,630	2,900
Electrical machinery	156	836	1,535	3,370	9,950	18,300
Transport machinery	14	148	253	710	2,280	3,560
Precision machinery	96	435	745	520	1,830	3,090
Other manufacturing	85	99	110	2,420	2,950	3,470
Total	397	1,650	2,970	10,080	23,070	37,970



Table 3.5  
Export substitution ratio for all areas  
(Ratio of decrease of Japanese exports to increase of overseas sales)  
(per cent)

	1988	1995
Textiles	24	17
Chemicals	45	40
Iron & Steel	20	24
Non-ferrous metal	33	42
General machinery	40	53
Electrical machinery	55	45
Transport machinery	24	30
Precision machinery	50	42
Other manufacturing	35	37

Table 3.6  
Estimated decrease in Japanese exports  
(\$ million)

	EC			All areas		
	1988	1995		1988	1995	
		Case 1	Case 2		Case 1	Case 2
Textiles	20	20	20	840	790	1,020
Chemicals	346	490	760	3,610	5,350	8,710
Iron & Steel	140	190	220	1,560	2,650	3,710
Non-ferr. metals	14	20	30	790	1,440	2,080
General mach.	800	2,150	4,160	3,100	7,430	13,220
Electric mach.	4,970	8,370	16,380	24,640	37,760	69,430
Transport mach.	850	1,880	3,230	6,650	13,010	20,270
Precision mach.	1,400	2,020	3,460	3,730	5,150	8,690
Other manufact.	750	880	980	4,550	5,730	6,740
Total	9,290	16,020	29,240	49,470	79,310	133,870

Table 3.7  
Ratio of consumption of intermediate goods to sales  
(per cent)

	EC	All areas
Textiles	71	67
Chemicals	66	69
Iron & Steel	61	56
Non-ferrous metal	67	66
General machinery	72	75
Electrical machinery	74	72
Transport machinery	75	79
Precision machinery	70	75
Other manufacturing	56	62
Total	71	71

Table 3.8  
Intermediate goods purchased from Japan  
(per cent of total purchases)

	EC		All areas	
	1988	1995	1988	1995
Textiles	55	45	17	15
Chemicals	11	7	20	13
Iron & Steel	80	70	20	12
Non-ferrous metal	17	12	18	12
General machinery	54	30	52	35
Electrical machinery	57	37	61	42
Transport machinery	47	28	57	38
Precision machinery	65	36	72	47
Other manufacturing	12	10	24	20
Total	52	...	53	...

Table 3.9  
Estimated exports of Japanese intermediate goods  
(\$ million)

	EC			All areas		
	1988	1995		1988	1995	
		Case 1	Case 2		Case 1	Case 2
Textiles	36	40	50	470	550	710
Chemicals	56	60	90	1,246	1,380	2,250
Iron & Steel	350	350	400	902	780	1,090
Non-ferrous metal	5	5	6	358	360	520
General machinery	783	900	1,730	3,234	4,110	7,310
Electric machinery	3,875	5,320	10,410	21,155	28,390	52,190
Transport machinery	1,257	1,350	2,314	12,802	13,700	21,360
Precision machinery	1,322	1,320	2,260	4,306	4,970	8,380
Other manufacturing	150	140	150	2,292	2,290	2,690
Total	7,834	9,485	17,410	46,765	56,530	96,500

Table 3.10  
Private fixed-capital matrix (1985)  
(yen, billion)

	Textl.	Chemicl.	Iron & Steel	Non- ferr. metal	General mach.	Electric. mach.	Transport mach.	Precision mach.	Other Mfg.	Mfg. Total	Non-Mfg.
Textiles	2.5	296.0	320.0	214.0	2.4	1.6	1.5	0.5	11.6	20.9	229.7
Chemicals	0	0	0	0	0	0	0	0	0	0	0
Iron & Steel	0	0	0	0	0	0	0	0	0	0	0
Non-ferr. metal	0	0	0	0	0	0	0	0	0	0	283.1
General mach.	287.4	479.3	319.0	141.8	617.3	574.8	1488.0	94.5	2590.5	6565.8	4029.5
Electric mach.	42.9	131.3	227.3	36.9	651.8	1343.2	231.5	83.1	427.8	3175.8	5203.4
Transp.mach.	17.9	22.4	22.0	7.1	32.7	32.7	34.5	15.0	191.6	375.9	4579.8
Precision mach.	5.3	60.2	24.8	10.3	25.5	45.8	34.1	67.5	56.1	329.6	509.9
Other Mfg.	8.9	9.2	11.1	6.7	11.7	19.4	12.7	1.7	67.0	148.4	1696.9
Mfg. Total	365.1	702.7	604.6	202.9	1341.4	1990.6	1802.3	262.1	3344.6	10616.3	16532.2
Non-Mfg.	207.6	418.1	468.9	155.6	542.0	1024.0	781.8	80.0	1985.3	5663.4	31251.7
Total Industry	572.7	1120.8	1073.5	358.5	1883.4	3014.6	2584.1	342.2	5330.0	16279.7	47783.9



Table 3.11  
Japanese FDI in 1988 and 1995 (corresponding to MITI's survey)  
(\$ million)

	EC			All areas		
	1988	1995		1988	1995	
		case 1	case 2		case 1	case 2
Textiles	5	7	16	51	67	166
Chemicals	19	30	88	239	407	1,231
Iron & Steel and non-ferr. metal	3	3	8	200	291	766
General machinery	29	61	214	204	386	1,259
Electric machinery	61	129	459	463	903	3,044
Transport machinery	36	66	209	227	365	1,069
Precision mach. and other manuf.	21	31	93	254	353	983
Total	174	327	1,087	1,638	2,772	8,518

Table 3.12  
Purchases of capital equipment from Japan  
(per cent)

		1988	1995
EC	Textiles	13.6	14.5
	Chemicals	5.3	3.3
	Iron & Steel	0	0
	Non-ferrous metal	29.0	20.0
	General machinery	17.1	13.0
	Electric machinery	35.3	25.4
	Transport machinery	15.6	9.5
	Precision machinery	17.5	9.5
All areas	Textiles	31.8	27.3
	Chemicals	16.3	9.2
	Iron & Steel	37.5	30.0
	Non-ferrous metal	67.9	50.5
	General machinery	26.5	18.6
	Electric machinery	45.3	33.5
	Transport machinery	35.3	27.3
	Precision machinery	38.5	21.3

Table 3.13  
Capital goods purchased by Japanese affiliates  
(\$ million)

	EC			All areas		
	1988	1995		1988	1995	
		Case 1	Case 2		Case 1	Case 2
Textiles	0	0	0	0	2	9
Chemicals	0	0	0	0	0	0
Iron & Steel	0	0	0	0	0	0
Non-ferrous metal	0	0	0	0	0	0
General machinery	94	170	545	915	1,485	4,435
Electric machinery	69	137	476	598	1,084	3,469
Transport machinery	5	9	26	49	78	234
Precision machinery	5	8	29	53	89	269
Other manufacturing	1	3	11	23	34	102
Manufacturing total	174	327	1,087	1,638	2,772	8,518

Table 3.14  
Exports of Japanese capital goods to foreign affiliates  
(\$ million)

	EC			All areas		
	1988	1995		1988	1995	
		Case 1	Case 2		Case 1	Case 2
Textiles	0	0	0	0	1	2
Chemicals	0	0	0	0	0	0
Iron & Steel	0	0	0	0	0	0
Non-ferrous metal	0	0	0	0	0	0
General machinery	16	22	71	242	276	825
Electric machinery	24	35	121	271	363	1,162
Transport mach.	1	1	2	17	21	64
Precision mach.	1	1	3	20	19	57
Other manuf.	0	0	1	8	9	25
Manuf. total	42	59	198	558	689	2,135

Table 3.15  
Overall estimated results (effects 1 to 4)  
(\$ million)

	EC			All areas		
	1988	1995		1988	1995	
		case 1	case 2		case 1	case 2
Textiles	-11	-13	-21	990	1,049	1,358
Chemicals	299	447	697	3,364	5,980	9,740
Iron & Steel	-194	-141	-159	928	2,390	3,350
Non-ferr. metal	9	17	26	1,072	2,170	3,150
General mach.	17	1,315	2,527	154	4,674	7,985
Electric mach.	1,227	3,851	7,484	6,584	18,957	34,378
Transport mach.	-394	677	1,167	-5,459	1,569	2,406
Precision mach.	173	1,134	1,942	-76	1,991	3,343
Other manuf.	685	839	939	4,670	6,381	7,495
Manuf. total	1,811	8,126	14,602	12,227	45,161	73,205

Table 3.16  
Ratios of Japanese ownership  
(per cent)

	EC	All areas
Textiles	70	65
Chemicals	78	67
Iron & Steel	56	63
Non-ferrous metal	96	67
General machinery	88	81
Electrical machinery	93	82
Transport machinery	70	59
Precision machinery	86	81
Other manufacturing	79	70
Manufacturing total	85	72

Table 3.17  
Overall direct impact corresponding to MITI's survey  
(\$ million)

	EC			All areas		
	1988	1995		1988	1995	
		case 1	case 2		case 1	case 2
Textiles	-8	-9	-15	640	680	880
Chemicals	230	350	540	2,250	4,000	6,530
Iron & Steel	-110	-80	-90	580	1,510	2,110
Non-ferrous metal	9	16	25	720	1,450	2,110
General machinery	15	1,160	2,220	120	3,790	6,470
Electric machinery	1,140	3,580	6,960	5,400	15,540	28,190
Transport machinery	-280	470	820	-3,220	930	1,420
Precision machinery	150	980	1,670	-60	1,610	2,710
Other manufacturing	540	660	740	3,270	4,470	5,250
Manufacturing total	1,686	7,127	12,870	9,700	33,980	55,670

Note: The above covers about 70% of the direct impact induced by all the Japanese foreign affiliates.

Table 3.18  
Total reduction in Japanese trade surplus  
with the EC under different scenarios  
(\$ billion)

EC	1988	actual	2.4
	1995	case 1	10.2
		case 2	18.4
All areas	1988	actual	13.9
	1995	case 1	48.5
		case 2	79.5

Source: Author's calculations



Table 3.19  
US direct investment  
(\$ million)

	Food	Chem.	Metals	Other mach.	Electric mach.	Transp. mach.	Other mfg.	Mfg. Total	All industries
1982									
Developed countries	5,456	13,860	3,848	11,799	5,001	9,034	15,236	64,234	154,644
Canada	1,438	4,177	1,373	1,942	1,363	3,838	4,639	18,770	43,315
Europe	3,360	7,519	2,129	8,124	3,140	4,203	9,311	37,786	92,624
Japan	159	789	68	1,112	234	538	332	3,232	6,636
Developing countries	2,015	4,520	1,624	2,084	2,275	2,144	4,603	19,266	47,432
All countries	7,471	18,380	5,472	13,883	7,276	11,178	19,839	83,500	207,320
1988									
Developed countries	10,907	24,583	6,226	22,703	6,414	14,634	23,384	108,850	245,498
Canada	2,178	5,393	3,312	3,160	2,176	6,408	5,514	28,141	61,244
Europe	7,812	14,691	2,464	16,373	3,283	7,306	16,002	67,930	152,232
Japan	382	2,430	197	2,630	852	630	753	7,876	16,868
Developing countries	2,214	5,884	1,599	2,905	4,166	2,980	5,220	24,969	76,837
All countries	13,121	30,467	7,825	25,608	10,580	17,614	28,604	133,819	326,900

Source: US Commerce Department, *Survey of Current Business*

Table 3.20  
Operations of US foreign affiliates  
(majority-owned, non-bank)  
(\$ million)

	1982		1988	
	All non-bank industries	Manufacturing	All non-bank industries	Manufacturing
US exports to affiliates	52,753	34,748	90,916	63,237
US imports from affiliates	46,101	26,417	76,042	57,714
US trade balance with affil.	6,652	8,331	14,874	5,523
Sales of affiliates	730,235	271,099	928,417	464,112
To US persons	76,780	26,244	101,239	...
To foreign persons	653,455	244,855	827,178	...
(local sales)	477,961	179,267	606,837	...
(to other countries)	175,494	65,588	220,341	...
Number of employees(1000)	5,022	3,358	4,769	3,064
Compensation of employees	89,445	56,714	117,420	74,407

Source: US Department of Commerce

Table 3.21  
Operations of US non-bank affiliates (1982)  
(\$ million)

		Manufacturing					Transp. mach.	Other manuf.	All industry (non-bank)
		Food	Chemicals	Metals	Other mach.	Electr. mach.			
Sales	Dev'd econ.	24,874	43,785	12,036	36,339	17,270	49,026	36,904	536,905
	Canada	5,258	7,479	2,911	4,971	4,120	19,015	9,469	108,038
	Japan	16,807	30,719	8,414	27,189	11,906	25,391	24,313	364,405
	Europe	648	1,659	108	2,300	536	4	625	25,788
	LDCs	7,711	11,056	2,979	4,131	7,977	8,157	8,854	185,215
	World	32,585	54,840	15,015	40,470	25,248	57,183	45,758	730,235
FDI	Dev'd econ.	5,239	12,746	3,563	11,519	4,657	8,278	14,284	141,028
	Canada	1,438	4,058	1,321	1,939	1,344	3,832	4,330	41,890
	Japan	3,225	7,181	2,004	7,955	2,952	4,003	9,039	85,481
	Europe	76	433	21	...	135	2	...	3,360
	LDCs	1,843	3,717	1,308	1,906	2,009	1,870	3,733	39,353
	World	7,083	16,463	4,871	13,425	6,666	10,149	18,017	185,230
Sales/FDI (per cent)	Dev'd econ.	4.7	3.4	3.4	3.2	3.7	5.9	2.6	3.8
	Canada	3.7	1.8	2.2	2.6	3.1	5.0	2.2	2.6
	Europe	5.2	4.3	4.2	3.4	4.0	6.3	2.7	4.3
	Japan	8.5	3.8	5.1	...	4.0	2.0	...	7.7
	LDCs	4.2	3.0	2.3	2.2	4.0	4.4	2.4	4.7
	World	4.6	3.3	3.1	3.0	3.8	5.6	2.5	3.9

Source: US Department of Commerce, *Benchmark Survey of US Direct Investment Abroad*, 1985

Direction of effect ----->				
Japanese FDI	Capital stock of foreign affiliates	Sales of foreign affiliates	Not to Japan	<i>Effect 1</i> Decreased Japanese exports (Export substitution ratio)
			To Japan	<i>Effect 2</i> Increased Japanese imports
		Foreign affiliates' purchases of intermediate goods		<i>Effect 3</i> Increased Japanese exports
		Foreign affiliates' purchases of capital goods		<i>Effect 4</i> Increased Japanese exports
	Stimulus to foreign countries			<i>Effect 5</i> Increased Japanese exports

Figure 3.1 Flow chart of the estimated impact of Japanese FDI on Japan's trade balance



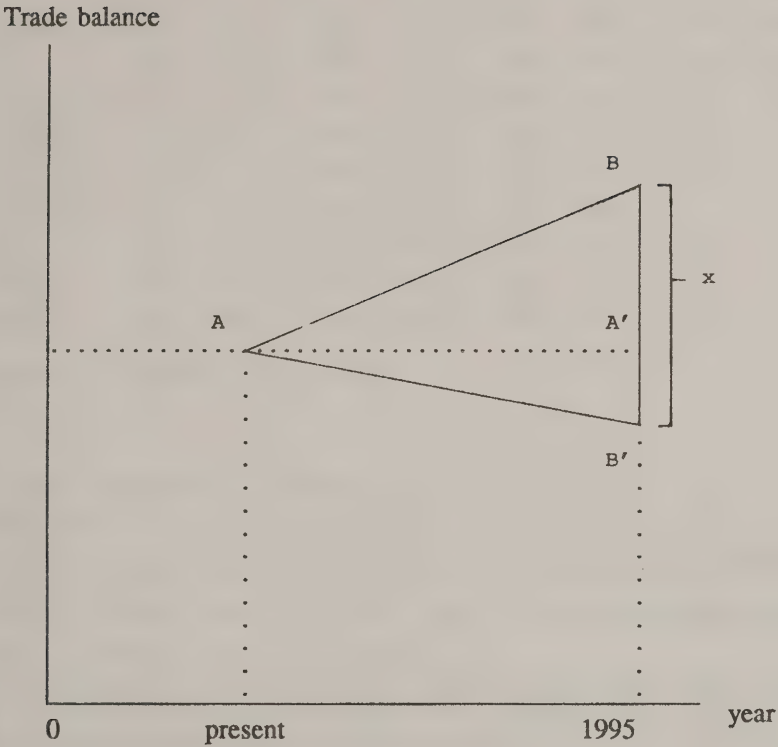


Figure 3.2 The effects of the baseline assumption on the trade balance

## 4 Investment in financial services

TOSHIHARU KITAMURA

### Introduction

#### *Outward financial FDI*

The majority of Japan's outward FDI has been in the non-manufacturing sector whose share averages somewhere between 70 per cent and 80 per cent (see data in Chapter 1). Outward FDI in the non-manufacturing sector has been dominated by the financial sector, whose share has jumped since 1985 and now averages around 30 per cent of all outward direct investment. The characteristics of Japanese financial FDI will be examined in more detail in the following sections. They can be summarized as follows. First, financial assets have been rapidly accumulated against a background of high income growth and high savings in Japan, providing wider international business scope for Japanese financial institutions. The stable economic performance which was sustained in the 1980s, together with the appreciation of the yen since 1985, helped these institutions consolidate their international foothold. Even in the few years between 1984 and 1989, the share of international banking assets held by Japanese banks grew from 23 per cent to 38 per cent (see Table 4.1).

Second, the increasing need of Japanese corporations for diversified financial services in raising capital and fund management also contributed to their

Table 4.1  
International bank assets by nationality of banks  
(\$ billion)

	1984		1986		1988		1989	
		%		%		%		%
Japan	518	23.0	1,120	32.4	1,756	38.2	1,967	38.3
US	594	26.4	599	17.3	675	14.7	727	14.1
France	201	8.9	290	8.4	384	8.3	432	8.4
Germany	143	6.4	270	7.8	354	7.7	436	8.5
UK	169	7.5	212	6.1	239	5.2	247	4.8
Switzerland	83	3.7	152	4.4	182	3.9	...	...
Italy	90	4.0	145	4.2	201	4.4	...	...
Others	451	20.1	666	19.4	807	17.6	...	...
Total	2,249	100.0	3,454	100.0	4,598	100.0	5,139	100.0

Source: BIS *International Financial Markets*

overseas expansion. In addition, the 1980s was a period of financial deregulation and liberalization in major countries, and of technological innovation in computerization and telecommunications in the financial sector. These changes facilitated more efficient financial transactions across national borders. Japanese financial institutions were among those which pursued these new business opportunities most aggressively.

Third, the substantial growth in international activities by Japanese financial institutions did not mean that they took financial leadership in international transactions. On the basis of banking assets, the world's leading commercial banks were Japanese. On the basis of lead management of syndicated loans, however, US banks were dominant. Similarly, among book runners for Eurobonds, the top four were Japanese securities houses. Japanese houses, however, played a subordinate role as book runners for straight bonds and floating rate notes which are the traditional and principal form in Euro-markets (see Table 4.2). In other words, US and European financial institutions continued their financial leadership in promoting international transactions and in providing new financial products and fund management services.

### *Inward financial FDI*

In contrast to Japan's outward financial FDI, inward FDI has been dominated by the manufacturing sector, whose share averages around 70 per cent (see

Table 4.2  
Top ten financial institutions (1989)

Banks		Securities Houses	
Asset base	Arrangers of syndicated loans	Book runners of all Euro-bonds	Book runners of SB & FRN
Dai-Ichi Kangyo	Citicorp	Nomura	Nomura
Sumitomo Bank	Manuf.Hanover	Daiwa	Deutsche Bank
Fuji Bank	Bankers Trust	Yamaichi	CSFB
Mitsubishi Bank	Chase Manht.	Nikko	JP Morgan Secs
Sanwa Bank	Bank of America	Deutsche Bank	Merrill Lynch
IBJ	JP Morgan	CSFB	Bankers Trust
Norin-Chukin Bank	Nat. Westminster	JP Morgan Secs	Paribus
Credit Agricole	Barclays	Merrill Lynch	Daiwa
Tokai Bank	First Nat.Bank Chicago	Morgan Stanley	Morgan Stanley
Mitsubishi Trust Bank	Warburg Securities	Paribas	Solomon Bros

Note: SB is straight bond and FRN is floating rate note

Source: *The Banker*, *Euromoney*, and *IFR*

Table 4.3  
Foreign banks' share of total banking assets

	Total banking assets	Foreign banks' share	
Japan (3.89)	Y622 trillion	Y21 trillion (3.4%)	UK banks (0.4%) US banks (0.6%)
UK (6.89)	£1,164 billion	£690 billion (59.3%)	Japan banks (21.8%) US banks (10.0%)
USA (6.89)	\$3,074 billion	\$696 billion (22.6%)	Japan banks (12.1%) UK banks (1.3%)

Sources: Bank of Japan, *Zenginkyu*, Bank of England *Quarterly Bulletin*, American Banker.

data in Chapter 5). The financial sector is estimated to account for less than 10 per cent of all inward FDI. Foreign financial institutions have not demonstrated a competitive performance in Japan. To take banking assets, for instance, at the end of March 1989 foreign banks in Japan had a 3.4 per cent share of Japan's total banking assets. Although Japan's financial deregulation and liberalization started in 1984, the share of foreign financial institutions



continued to decline from the peak of 5 per cent in 1982. By contrast, in 1989, non-UK banks in the UK had a 59 per cent share of the UK's total banking assets and non-US banks in the US had a 23 per cent share of the US's total banking assets (see Table 4.3). The foreign banks' weak performance has recently raised questions about possible entry barriers caused by Japan's financial regulations and business practices.

Similar to the contrast between Japan's total outward and inward FDI, there is also a striking contrast between inward and outward financial FDI. On a notification basis, outward FDI in the financial sector was \$15 billion in 1989. The cumulative total between 1951 and 1989 was \$57 billion (see Table 4.4). The inward FDI was \$180 million in 1989. The cumulative total between 1951 and 1989 was \$572 million. There are three main reasons for this gap.

First, in contrast to the great expansion by Japanese financial institutions, foreign financial institutions in Japan have not gained prominence in providing conventional financial services. Rather, leading foreign financial institutions seem to attach more importance to providing specialized financial services such as off-balance-sheet operations. On the whole, they seem to regard expansion of their business volume as of secondary importance.

Second, FDI data on a notification basis do not include foreign banks' and securities companies' operations in Japan. Their operations are directly controlled by the Banking Law and Stock and Exchange Law. On the outward side, however, FDI data include Japanese financial institutions' overseas investment. Assuming, for simplicity, that the FDI for each branch of foreign banks in Japan is equal to the average net worth of subsidiary trust banks in Japan (i.e. \$18 million) and that the capital of foreign securities houses represents FDI for each foreign securities house, then the total inward FDI in the financial sector is roughly estimated at \$4.1 billion rather than \$572 million. This compares to the cumulative total of \$57 billion for Japan's outward financial FDI.

Third, the outward FDI in the financial sector includes subsidiary investment companies, mostly established in the West Indies and European tax havens, which could be regarded as a variation of portfolio investment rather than direct investment. Besides, finance companies set up by non-financial Japanese corporations appear to be peculiar to Japan's financial FDI.

In sum, data on outward financial FDI tend to exaggerate the real situation, while data on inward FDI have the reverse tendency. Nevertheless, Japan's outward financial FDI exceeds significantly its inward counterpart. This difference, together with the financial mergers and acquisitions and visible presence of Japanese financial institutions overseas, have caused friction with host countries. The latter are also concerned about the anaemic performance of their financial institutions in Japan.

The rest of this chapter examines the determinants of Japan's financial FDI, its geographical distribution, and developments in Japan's financial FDI in

Table 4.4  
Japan's financial investment in Europe  
(\$ million)

	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	Total 1951-89
UK	46	35	83	80	122	193	644	1,709	2,634	2,535	8,267
Germany	7	0	0	0	21	1	0	52	166	163	456
France	0	2	0	0	4	2	2	133	69	62	291
Netherlands	15	6	20	0	343	442	476	733	344	2,580	5,072
Belgium	34	17	0	66	41	10	10	0	68	133	405
Luxembourg	6	101	107	265	312	280	1,063	1,740	654	612	5,186
Ireland	0	0	0	0	0	0	0	0	0	13	13
Italy	0	0	0	0	0	0	0	12	0	45	58
Spain	0	0	0	0	0	0	0	0	0	15	16
Portugal	0	0	0	0	0	0	3	3	0	2	8
Europe	118	118	258	432	1,022	953	2,281	4,532	4,345	6,406	21,258
World	380	380	533	1,167	2,085	3,805	7,240	10,673	13,104	15,395	57,271

Note: Data on Japan's investment in Greece and Denmark are not available.

Source: Ministry of Finance, Japan

Europe. Issues related to inward financial FDI are only briefly discussed in the following sections. A more detailed analysis of inward FDI in general is provided in Chapter 5.

## **Determinants of financial FDI**

### *Cross-border investment*

Japan's investment in the financial sector, which began in the 1960s and grew after the first oil crisis in 1973-4, expanded considerably during the 1980s. The 1980s witnessed the most dramatic outward expansion by Japanese financial institutions. More than two-thirds of their overseas subsidiaries and branches were established during this period. Although the share of the financial sector in all outward FDI was declining in the late 1980s, its importance is expected to continue for the time being, bolstered by the outward thrust maintained by large financial institutions and by the eagerness of regional banks to provide the cross-border services which their clients are increasingly demanding.

Based on the historical developments in Japan, the outward deployment in the financial sector is summarized in Table 4.5. In many cases, the outward thrust of financial institutions follows the evolutionary process described in that table. However, there are cases of regional banks which engage directly in cross-border business without first going through the stage of engaging in nationwide operations. In practice, driven by the necessity to serve their client corporations or investors, some regional banks and securities houses had to start their cross-border business in the 1980s. In short, the overseas activities of Japanese corporations and the increasing cross-border business of medium-sized corporations have demanded more and more sophisticated and diversified international financial services. This has forced major financial institutions to improve their services. It has also forced regional and medium-sized institutions to explore the possibilities of cross-border business. On the global front, financial institutions have also sought their own business opportunities in the growing borderless arena of Euro-markets through newly developed financial instruments.

By definition, FDI assumes the cross-border flow of capital even though FDI is only one way that corporations can expand their business. This is partly due to the fact that markets differ across national borders and partly due to the perception that differences in legal, tax and accounting systems or in business climate will induce foreign corporations to adopt different business policies. In addition, differences in the economic and political conditions of host countries will require investing corporations to adopt distinct investment strategies in different host countries.

Table 4.5

	(A) Demand factors	(B) Supply factors
Local	Local trading/manufacturing activities	Local financial services
Nationwide	Nationwide trading/manufacturing activities	Nationwide financial services
National border/crossborder	International trade, emigration, investment diversification (Differences in legal, tax and accounting systems, business climate, language etc)	Corresponding financial service, business tie-up
Global	Overseas sales base, overseas production, overseas management	Rep. office-branch, subsidiary syndicated loan, bond underwriting, trading, Financial network,
	International fund raising and fund management, M & A activities etc	24-hour service, advisory service, etc

Furthermore, inward FDI sometimes meets with a xenophobic response because it is perceived to be a threat to national tradition, culture or security. This sensitivity is illustrated by the following two non-financial cases in the USA. American newspapers were unconcerned when an Australian investment was made in 20th Century Fox, but the situation was quite different when a Japanese investment was made in Columbia Pictures in 1989. National sensitivity is a little more complicated in the case of financial FDI. It tends to be associated with financial reciprocity, national treatment, level-playing-field arguments or other public policy concerns.

### *Euphoria in the 1980s*

Japan's current account was in surplus throughout the 1980s. The ratio of the surplus to GNP was above 2 per cent between 1984 and 1988. The yen started at a level of Y250 per US\$ in 1980, then fell to Y260 in February 1985. It



appreciated strongly to Y121/\$ during 1988, ending with a slight depreciation to Y150/\$ towards the end of 1989. Throughout the decade, the ratio of household saving of disposable income remained between 15 per cent and 20 per cent. Meanwhile fiscal policies in the public sector remained rather tight and monetary policies were kept, on the whole, accommodative. Moreover, interest rates both at home and overseas were generally on the decline or at low levels, which made the securities business look more lucrative and promising than before. With the favourable financial developments and abundant financial resources, the international assets of Japanese banks rose rapidly, as indicated in Table 4.1. The brokerage and underwriting businesses of Japanese securities houses expanded as well.

The momentum in outward FDI in the 1980s, however, coincided with fairly favourable conditions. First, Japanese financial institutions were in a position to extend their international intermediary services with their large financial resources. Second, financial deregulation and liberalization, which had been initiated in the US in the early 1980s, proceeded smoothly in other major countries as well. These factors will not disappear, at least during the earlier part of the 1990s. However, it remains to be seen whether they are sufficient to sustain the euphoric momentum of financial FDI.

### *Deregulation and its international impact*

Deregulation, liberalization and technological innovation in the financial sector have been deeply interconnected. Interconnection of this type exists in other service industries like telecommunications, transportation and commerce. Sophisticated combinations of computers and telecommunications have expanded the innovative potential of these industries and provided a wide range of new business opportunities. More specifically, technological innovations in finance have facilitated accurate and speedy transactions both domestically and internationally. The volume of financial transactions across borders is now much larger than what is needed for trade in goods and services. As the Chairman of the US Federal Reserve Board, Alan Greenspan, testified in Congress in January 1990, '[the innovations have led to] a broad spectrum of complex financial instruments that can be tailored to the hedging, funding, and investment needs of a growing array of market participants...[innovations have also] reduced the costs of managing operations around the globe and have facilitated direct, as well as portfolio, investment.'

Financial innovations have also led non-financial corporations to explore and develop a worldwide strategy for raising and managing funds. These developments affected first of all the US domestic markets around 1980 and immediately spilled into the tightly regulated markets in other countries. They gradually entailed financial market deregulation, privatization or liberalization. On the international front, as the volume of cross-border transactions

expanded and the flows of financial FDI intensified, financial frictions became more frequent than in previous decades. Monetary authorities were increasingly involved in settling complicated issues stemming from market practices and regulations.

In November 1983 a committee was established for consultations between the financial authorities of the US and Japan. The committee was later followed by a Working Group on Financial Markets. Japan initiated bilateral financial meetings with the UK in October 1984, with West Germany in June 1985, France in May 1986, Italy in May 1986 and Canada in October 1986.

These bilateral financial talks take place every year, exchanging views on financial policies and focusing on specific market issues. Underlying these bilateral financial talks is the strong belief that liberal policies should be followed and open access should be granted to foreign participants in the globalized financial markets. So far the bilateral meetings have contributed to the resolution of a number of financial disputes. They have resulted in better access to trust banking business, investment management and advisory business in Japan and membership of the Tokyo Stock Exchange.

### **The destination of financial FDI**

Two factors are crucial for understanding the destination of Japanese outward financial FDI. The first is the need for supportive financial services for Japanese corporations engaging in overseas economic activities. The second is the gravitational pull of world financial centres which lure Japanese financial institutions with their own business attractiveness. The former factor (demand factor) was mainly responsible for Japan's financial FDI to the west coast of North America, Brazil, etc., while the latter factor (attraction of financial centres) was mainly responsible for the FDI to Switzerland, Luxemburg, etc. The combination of these two factors was responsible for Japanese interest in New York, London, Hongkong and Singapore. In the 1950s and 1960s, the former appeared to be more dominant. In those periods supportive financial services were provided exclusively by the banking sector.

The first oil embargo in 1973-4 shifted the priority from the former factor to the latter. The new business for petrodollar recycling, together with increased foreign exchange and treasury business in Euro-markets, turned the attention of Japanese banks to New York, London and other major markets. Japan's leading securities houses also began to engage in cross-border brokerage business for portfolio investments, which were boosted in the financial deregulation which took place in the 1970s.

The 1980s witnessed a rapid and far-reaching diversification of financial activities, while syndicated loans to developing countries, which boomed in the 1970s, lost momentum in the wake of the Mexican debt crisis in 1982.

Financial diversification had several different aspects: securitization, product variation, development of risk-reducing techniques, market globalization, etc. The new business flourished mainly in world financial centres. It gave rise to new approaches to the external network deployment of Japanese financial institutions. For instance, there was an increasing number of cases in which one bank had other subsidiaries in addition to its branch in London in order to provide a variety of financial services for portfolio investment and underwriting, trust and advisory businesses and leasing or factoring transactions. There was also a number of cases of securities houses with a subsidiary for banking services in major financial centres.

### *Insurance companies*

The insurance business in Japan is divided into life and non-life/property. The life insurance sector, which is indigenous and personal in nature, has developed its own type of outward FDI against a background of rapidly increasing reserve funds. Before 1980, portfolio investments by life insurance companies were uniform and narrow. With the increasing volume of portfolio investments, however, life insurance companies and other institutional investors began to seek more sophisticated means for lucrative cross-border fund management. The total assets of life insurance companies amounted to Y110 trillion (\$750 billion) at the end of 1989, of which nearly 20 per cent was invested overseas. They are now in investments of many different forms and currencies. Although detailed data are not available, part of the investment takes the form of outward FDI, via either subsidiaries for real estate management or subsidiaries for investment fund management. In the meantime, in the late 1980s a number of life insurance companies had minority capital participation in financial institutions in the US and western Europe.

Capital payments to subsidiaries for investment fund management are classified as investment in the financial sector in Japan's FDI data. Many of these subsidiaries of life insurance companies were established in tax havens in Europe and the West Indies. Their assets, which are controlled by their affiliated investment advisory agencies, are redirected to portfolio investments in North America and Western Europe.

The non-life/property insurance sector, whose business is partially characterized by cross-border transactions, has established a widespread network of subsidiaries, branches or agents for insurance businesses (ninety-five insurance business subsidiaries and 125 branches and agents as of 1989). About two-thirds of their overseas insurance business is in the US, the rest being shared between European and Southeast Asian markets.



## *Non-financial companies*

One of the reasons for the rapid expansion of Japan's financial FDI in the 1980s was the growth of subsidiary finance companies, most of which were set up by trading and manufacturing corporations. Overseas finance companies of Japanese origin began in the early 1970s when some Japanese corporations tried to take advantage of tax havens in the West Indies. However, the trend was hampered by the oil embargo in 1973-4 and the introduction of measures to contain the abuse of tax havens.

The establishment of overseas finance companies has been resumed actively since 1984. Their parent corporations reexamined their global management strategy and sought means to fulfil their new financial requirements, to respond quickly to the capital needs of their overseas subsidiaries and to manage their surplus funds more efficiently. No official data are available on the growth of overseas finance companies. However, a private survey by Nikkei-koshasai-joho (9 April 1990) indicates that most of the overseas finance companies set up by Japanese trading and manufacturing corporations were located in the Netherlands, the UK or the US. As of March 1990, there were 83 subsidiary finance companies in the Netherlands, 39 in the UK and 59 in the US.

The typical function of a finance company is, first, to integrate funding in order to provide financial resources to affiliated corporations engaging in a variety of overseas activities. The group of affiliated corporations is then in a better position to raise funds efficiently, thereby reducing capital costs. Finance companies of this type are concentrated in the Netherlands and the UK. Those in the Netherlands appear to have a comparative advantage in funding through commercial paper (CP) and bonds, while those in the UK do it through borrowings from financial institutions. Japan's major corporations specializing in the export of electronic products and automobiles or general trading companies took advantage of finance companies of this type.

Their second function is to improve fund management. Through a subsidiary finance company, the parent company and its group can accumulate financial know-how for investment management and diversification. As explained earlier, Japanese institutional investors have already exploited subsidiary investment companies of this type. Now, an increasing number of trading and manufacturing companies have been setting up finance companies of their own. Most of them are located in London and the tax havens of Europe and the West Indies. The third function of a finance company is to back up consumer credit and leasing in order to facilitate sales of products of the affiliated corporations. Finance companies of this type are more common in the US than in Europe.

Further, finance companies in Europe tend to have additional functions. They integrate multi-currency transactions, thereby reducing transaction costs



and foreign exchange risk. They make the most of tax differences between different countries, thereby minimizing the tax burden. They consolidate managerial control of affiliated subsidiaries in Europe. Affiliated finance companies also cooperate with each other so that, for example, a subsidiary company in the Netherlands raises funds through CP and another subsidiary company in London manages the funds for investment purposes.

While there are good reasons for locating finance companies in London, finance companies in the Netherlands are newcomers. In the Netherlands, financial deregulation has gathered pace since 1986, providing a liberal framework for inward FDI, foreign exchange transactions and funding operations through bonds and CP. Favourable tax treatment is also available. Although the rate of corporate income tax is 42 per cent compared with 35 per cent in the UK, there is no withholding tax on payments of interest and royalties while the withholding tax on external payments of dividends is very low. The Netherlands has a wide network of tax treaties with some forty countries. Uncertainties about tax payments are, therefore, reduced by advance tax ruling. In addition, subject to certain constraints, capital gains are exempt from taxes.

The business climate in the Netherlands created by the above-mentioned conditions and incentives has encouraged the establishment of foreign subsidiaries. As a result, Japanese trading and manufacturing corporations have a strong interest in setting up their finance companies in Europe. Their investments in the Netherlands (and other European countries) are expected to continue for the time being.

### **The form of financial FDI**

The branching policy of Japanese banks overseas proceeded slowly in the 1950s (26 branches) and 1960s (26 branches). During that time the cross-border banking business generally took the form of branches with the exception of the establishment of a few subsidiaries. Branching intensified in the 1970s (73 branches) and 1980s (150 branches). During that period the number of subsidiaries also increased (61 and 205 respectively). The extension of the banking network was followed by the emergence of cross-border business by Japanese major securities houses. By 1985 overseas branches of Japanese securities houses had been replaced by subsidiaries for ease of management (see Tables 4.6 and 4.7).

The form of financial FDI varies according to differences in legal, accounting and tax systems between different countries. It also varies for reasons of management. For instance, foreign commercial banks participate in Japan's financial market in branch form. By contrast, foreign financial institutions set up their trust banks in Japan in subsidiary form. When foreign insurance companies establish their business units in Japan, they can be in

Table 4.6  
Overseas activities of Japanese banks

Year	70	71	72	73	74	75	76	77	78	79	80	81	82	83	84	85	86	87	88	89	1989 (Dec)
Branches		4	15	10	16	3	6	10	4	5	12	12	8	9	10	14	17	21	26	21	275
Subsidiaries	2	4	5	11	14	..	7	7	10	1	8	7	14	15	16	33	31	18	29	34	269
Rep Offices	11	23	18	22	18	27	23	12	16	22	24	23	55	42	34	63	36	25	38	35	441
Total	13	31	38	43	48	30	36	29	30	28	44	42	77	66	60	110	84	64	93	90	985

Table 4.7  
Overseas activities of Japanese securities houses

Year	70	71	72	73	74	75	76	77	78	79	80	81	82	83	84	85	86	87	88	89	1989 (Dec)
Branches	4	..	..	2	..	1	..	2	..	1	2	..	1	..	..	..	..	..	..	..	0
Subsidiaries	3	1	5	5	2	2	..	6	5	3	2	4	6	4	3	3	20	12	23	15	131
Rep Offices	1	5	5	7	4	4	3	..	2	4	7	5	3	7	9	22	21	19	23	21	91
Total	8	6	10	14	6	7	3	8	7	8	11	9	10	11	12	25	41	31	46	36	222

'Subsidiary' means a corporation of more than 50% capital participation by a Japanese bank or securities company

Source : Ministry of Finance, Japan

subsidiary, branch or agent form. Outside Japan, Japanese banks set up both subsidiary and branch banks in many countries with a few exceptions in Canada, Australia and Switzerland where they have only subsidiaries. Japanese securities houses used to have both branches and subsidiaries but nowadays they all have subsidiaries for management reasons.

During recent years, an increasing number of financial institutions have begun to set up multiple overseas subsidiaries or branches in one country. For instance, a Japanese bank may use its overseas branch to provide international loans, while its subsidiary engages in custodian or investment advisory business and perhaps another subsidiary may do futures and options business in London. Representative offices abroad, which are not included in outward FDI, usually foreshadow subsequent FDI.

Financial FDI includes minority capital participation in foreign financial institutions (below 50 per cent and above 10 per cent). Since participation of less than 50 per cent does not generally imply management power, its main significance is in closer business relations and acquisition of management know-how. As a result, little information is available on the minority participation form of FDI. This is illustrated by the following examples. Subsequently to the dramatic developments in Eastern Europe in 1989, Japanese financial firms showed great interest in the possibilities for business in the area, but very few bankers remembered that in 1979 two Japanese banks had taken minority capital participation in the Central European International Bank in Hungary.

Another example of partial capital participation is that of two investment banks jointly set up in London in 1970. Japan International Bank was established by four Japanese city banks and three securities houses, while Associated Japanese Bank International was established by another group of four city banks and one securities house. These two international investment banks were a special case in that both commercial banks and securities companies participated. They aimed at consolidated loan-credit business in the Euromarket where individual Japanese financial institutions were comparative newcomers. While, however, business in Euro-money recycling expanded after the 1973-4 oil crisis and faced the subsequent market turmoil precipitated by the bankruptcies of Bankhaus I.D. Herstatt and Franklin National Bank, it was realized that the jointly incorporated bank did not have a strong management nucleus. This realization caused Japanese financial institutions to shift their emphasis towards 100 per cent owned subsidiaries in pursuit of tight management.



## Geographic distribution of Japan's financial FDI

Before the 1980s, Japan's FDI in the financial sector was distributed almost equally between Europe and North America. The cumulative total<sup>1</sup> between 1951 and 1979 was \$704 million for Europe and \$732 million for North America, followed by \$237 million for Asia. In the first half of the 1980s Japan's financial FDI continued this trend, both Europe and North America proving strongly attractive. In the latter half of the 1980s, however, the geographical distribution of FDI showed significant changes. First, Central and South America rapidly attracted a quarter of the total financial FDI, whereas, the share of Asia declined. Second, Europe became increasingly attractive. Japan's cumulative total between 1951 and 1989, the greater part of which is essentially accounted for by FDI in the 1980s, is \$21.3 billion for Europe (37 per cent), \$17 billion (30 per cent) for North America, \$13.7 billion (24 per cent) for Central and South America and \$3.6 billion (6 per cent) for Asia.

Financial FDI in Central and South America, which constituted more than 50 per cent between 1986 and 1989, and 37 per cent between 1951 and 1989, of Japan's entire FDI in this region, was concentrated in the West Indies (the Cayman and Bahama Islands). As indicated earlier, FDI in this region could be interpreted as a variation of portfolio investments and loans. Japanese institutional investors like insurance companies (and some trading companies) set up a great number of subsidiary investment funds through which they made portfolio investments and loans to North American and European countries. They made good use of this type of FDI for tax purposes. They also aimed at diversifying international portfolio investments and obtaining a stable flow of income.

Despite the paucity of information on the composition of Japan's financial FDI, the banking sector appears continuously as a major force behind financial FDI, followed by the securities business sector. In the latter half of the 1980s, however, these have been overtaken by subsidiary investment funds set up by institutional investors and finance companies set up by trading and manufacturing companies.

### *External network development*

As mentioned earlier, the development of overseas subsidiaries and branches by Japanese financial institutions in the 1980s was governed by two main factors: the induced demand for diversified international financial services and the gravitational pull of world financial centres such as London, New York, Switzerland, Hongkong and Singapore. On balance, the latter factor seems to have outweighed the former.

In the 1950s and 1960s banks established branches primarily in New York, London and Hongkong; California, Hawaii and Brazil also attracted Japanese



banks. In these places, banking services were very much needed by their clients of Japanese origin. In the 1970s, however, the oil embargo of 1973-4 drastically altered international financial flows, affecting international branching strategies. Major Japanese banks began to participate in intermediary petrodollar recycling. More and more Japanese banks took part in internationally syndicated loans to developing countries. Because their business was activated in New York and London, their attention focused on these markets and their networks were gradually extended to other financial markets. In the meantime, with the expansion of Euro-markets, there was an increase in their foreign exchange and treasury business in the major international financial centres. In the 1970s Japan's leading securities houses also began to engage in cross-border brokerage for Japanese stocks and shares. Their deployment followed the gravitational pull of world financial centres.

The diversification of financial services and the new computer-based financial instruments in the 1980s had a strong impact on the branching policies of both Japanese banks and securities houses (see Tables 4.6 and 4.7). As a result, Europe, where a number of major financial centres coexist, had attracted 158 business units (92 subsidiaries and 66 branches) or 29 per cent of the 544 Japanese banking units (275 branches and 269 subsidiaries) as of December 1989. Europe had also attracted 66 units or 50 per cent (all subsidiaries) of the 131 Japanese securities house units. The UK, West Germany and Switzerland were major host countries for Japanese banks, while the UK and Switzerland were the major host countries for securities houses (see Tables 4.8 and 4.9).

North America attracted 163 financial business units (64 subsidiaries and 99 branches) or 30 per cent of the total 544 overseas bank units. It also attracted 18 units or a 14 per cent share (all subsidiaries) of the total of 131 overseas securities house units. While bank units were somewhat widespread in the US, securities house units were concentrated in New York. Asia attracted 149 financial business units (67 subsidiaries and 82 branches) or 27 per cent of the 544 bank units. Hongkong and Singapore were two major areas for Japanese banks. They also attracted 37 units or 28 per cent (all subsidiaries) of the 131 securities house units.

It should also be noted that Japanese trading and manufacturing corporations are seeking to regroup their dispersed (geographically unorganized) sales and production units into three major zones: West Europe which is becoming more integrated, North America which has market uniformity and openness, and Southeast Asia which is still segmented but has strong economic potential. These developments have had an impact on the financial sector which is now being reorganized in the major financial centres. The analysis of FDI in the financial sector needs to take into account this globalization trend.

Table 4.8  
Overseas activities of Japanese banks by region  
(as of December 1989)

Country	Branches	Subsidiaries	Rep Offices	Total
UK	23	28	26	77
France	8	1	8	17
Germany	15	15	19	49
Italy	5	2	5	12
Spain	8		6	14
Belgium	7	7		14
Netherlands		4	3	7
Luxemburg		8		8
Portugal			2	2
Switzerland		25	10	35
Austria			2	2
USA	99	53	73	225
Canada		11	19	30
Mexico			17	17
Brazil		5	20	25
Panama	6	4	3	13
China	4		64	68
Hong Kong	31	32	25	88
India	4		4	8
Indonesia	1	10	15	26
Korea	14		8	22
Singapore	22	24	1	47
Thailand	2	1	14	17
Bahrain	1	1	17	19
Australia		21	33	54
Others	19	15		34
Total	275	269	441	985

Source: Ministry of Finance, Japan

Apart from the three major zones, Australia and Bahrain have presented an attractive financial environment for Japanese banks and securities houses, while Panama and Brazil have been attractive only to Japanese banks. Because of their concentration in the West Indies, the aforementioned subsidiary investment funds and finance companies, however, make the geographical features of Japan's overall financial FDI look rather different from the FDI of mainstream financial institutions.

Table 4.9  
Overseas activities of Japanese securities houses by region  
(as of December 1989)

Country	Subsidiaries	Rep Offices	Total
UK	31	5	36
France	4	8	12
Germany	4	2	6
Italy	5	5	6
Spain	4	4	4
Belgium	2	0	2
Netherlands	4	0	4
Luxemburg	1	1	2
Denmark	0	1	1
Switzerland	19	1	20
Sweden	0	2	2
Austria	0	1	1
USA	13	9	22
Canada	5	2	7
Brazil	0	2	2
China	0	13	13
Hong Kong	30	6	36
Korea	0	6	6
Malaysia	0	2	2
Singapore	7	6	13
Thailand	0	4	4
Bahrain	5	4	9
Australia	5	7	12
Total	131	91	222

Source: Ministry of Finance, Japan

### *Financial FDI in the US*

Before going into detail about Japan's financial FDI in Europe, a brief review of the situation in the US and Asia will be given. FDI in the US's financial sector constitutes approximately 30 per cent of Japan's total financial FDI. Japanese banks began operations in the US in the 1950s. Their trade-related financial services grew steadily in the 1960s. During this period, their activities centred upon New York, California and a few other areas where Japanese corporations (and emigrants) had business. Banks branches in the US

followed their Japanese manufacturing clients for the purpose of extending loans and other services to them.

The attention of Japanese banks shifted towards loans to developing countries in the latter half of the 1970s, but from the early 1980s their focus has been redirected to American domestic banking. Their scope already extended beyond traditional banking services to Japan-related businesses in the US. It now included financial services related to corporate bonds, construction loans related to the real estate business, loans for leveraged buy-outs (LBO) and so on. In the 1980s Japan's leading regional banks also started to extend their business to their clients' activities in the US.

Acquisitions of US financial institutions by Japanese banks were already visible in California in the later 1970s. They accelerated from the beginning of the 1980s to include commercial banks, primary dealers and leasing/factoring companies, even outside California. Consequently, their total US banking assets reached 12.1 per cent in mid 1989 (see Table 4.3). Japanese securities houses also advanced in the US. The big four houses started in the 1960s followed by medium-size houses in the 1970s and small houses in the 1980s. Almost all of their activities, which are primarily in dealing in US securities for Japanese investors, were concentrated in New York.

Japanese bankers privately estimate that their business in the US accounts for nearly half of their entire overseas business, the remainder being earned in Europe (30 per cent) and Asia (20 per cent). The reason for this difference is threefold. First, the complementary economic relationship between Japan and the US in the post-war period and the economic homogeneity of the US have helped Japanese banks to expand their business there. Second, the deep-rooted differences between legal systems and business practices have segmented the European banking market into several domestic sub-markets; this makes it difficult to develop banking business except in the less regulated Euro-markets. Third, Asian economies, which have not yet been well integrated, provide limited opportunities for banking business.

By contrast, a major part of overseas securities business by Japanese securities houses is transacted in Euro-markets. Again, the reason for this is threefold. First, with the most liberal climate for business in international securities, Euro-markets have provided the most flexible primary markets for Japanese issuers of bonds and securities houses. Having had difficulties in promoting primary market business in Japan's capital market, Japanese issuers and securities houses turned to Euro-markets. Second, the US securities market is controlled by detailed regulations and dominated by a number of well-established and energetic US securities firms. Third, the Asian markets are not yet ready for primary market business.

In sum, Japanese banks' business in the US is now more multiform, ranging from retail banking on the west coast to wholesale banking in New York.



They also have the possibility of participating in middle-market banking. At the end of the 1980s, the presence of Japanese banks was highly visible, even compared with other foreign banks in the US. As of June 1989 the share of foreign banks in the total banking assets of the US was 22.6 per cent. The share of Japanese banks was 12.1 per cent (see Table 4.3). By contrast, Japanese securities houses have a long way to go in the US securities market.

### *Financial FDI in Asia*

The Asian financial market is divided into three groups: Hongkong and Singapore; Korea and Taiwan; and the ASEAN countries (excluding Singapore). Hongkong and Singapore have the most sophisticated financial markets. About two-thirds of Japanese banks' branches and subsidiaries in Asia and almost all the subsidiaries of Japanese securities houses are in those two markets which are highly specialized in offshore financial services. In particular, despite its reversion to Chinese control in 1997, Hongkong still offers a wide range of business opportunities to Japanese financial institutions.

Japanese banks located in Hongkong and Singapore engage basically in loans for trading and manufacturing companies of Japanese origin. They also engage in the syndicated loan business (through their subsidiaries). Subsidiaries of Japanese securities houses provide portfolio investment services in Japanese securities. They aim primarily for overseas Chinese investors. Recently, however, they have been extending their business to dealing in local stocks and shares, setting up a variety of country funds and participating in equity finance for growing Asian corporations. So far a major part of business by Japanese institutions has been transacted in Hongkong, with Singapore appearing to be of secondary importance.

Japanese financial institutions are less visible in Korea and Taiwan, where financial markets are not yet as liberal as those in Hongkong and Singapore. However, with their rapid economic growth, current account surplus and growing financial sectors, Korea and Taiwan are moving towards financial deregulation and liberalization. The prospect of favourable development in their financial markets in the 1990s has aroused the interest of Japanese financial institutions.

Japanese institutions are barely represented in the ASEAN countries which, despite their strong economic performance in recent years, face the problem of current account deficits. In an attempt to attract foreign capital these countries are now reforming their financial policies. Against this background, the increasing number of trading and manufacturing companies of Japanese parentage in this area will sooner or later give Japanese financial institutions the incentive to improve and expand their services in those countries.

## Financial investment in Europe

Japan's FDI in Europe increased sharply in the late 1980s. As indicated in more detail in Chapters 1 and 2, Europe has become the second largest host area after the US. Most Japanese FDI in Europe is in non-manufacturing sectors. The financial sector's share is nearly half (47 per cent) of Japan's entire FDI in Europe. At its peak in 1987 it was as high as 69 per cent. In addition, Europe attracts more financial FDI (37 per cent of total financial FDI) than the US (30 per cent).

Among European countries, the UK used to be the major host country for financial institutions, followed by Luxemburg and the Netherlands. But in 1989, due to the mushrooming of finance companies, the Netherlands became the biggest host country followed by the UK and Luxemburg. The other EC member countries have relatively small shares but Switzerland is another important host country. The cumulative total of financial FDI in Switzerland exceeds the combined total of that in West Germany, France and Italy.

Measured by the number of financial business units, the UK ranks first, followed by Switzerland, West Germany, Belgium and France. Luxemburg and the Netherlands respectively have only nine and eight business units of Japanese banks and securities houses, as of December 1989 (see Tables 4.8 - 4.11). However, a large number of subsidiary investment funds and finance companies have been set up in these two countries by Japanese institutional investors and trading or manufacturing corporations. A large amount of Japan's financial resources has been directed to European investments through subsidiary investment funds.

Several factors are responsible for the concentration of financial FDI in Europe. First, Euro-markets, represented mainly by London, are the major markets for international currency business, bond transactions, insurance, fund management and corporate financial advisory services. A significant volume of international equity business is also transacted in London. In addition, there are the growing markets for futures and options.

Second, the prosperity of London as a world financial centre has stimulated other European financial centres such as Luxemburg and Amsterdam. More recently, spurred by plans for monetary union in the EC, financial markets in Paris and Frankfurt have been attempting to raise their profiles as major European financial centres. This regional competition will continue to attract Japanese institutions to the area.

Third, market unification in the EC is perceived in terms of Euro-dynamism rather than the Euro-pessimism which prevailed in the early 1980s. Recent developments in Eastern Europe have added to this dynamism, forcing Japanese trading and manufacturing corporations as well as financial institutions to adopt a new approach to the EC.

Table 4.10  
Foreign banks in the EC and Japan  
(as of March 1990)

	Japanese affiliates in the EC			EC affiliates in Japan		
	Branch	Subsidiary	Rep office	Branch	Subsidiary	Rep office
UK	23	30	27	6	1	14
France	8	1	8	13		5
Germany	15	15	19	8		12
Italy	6	2	4	3		4
Spain	9		6	2		5
Belgium	7	9	2	1		2
Neth.		5	2	5		3
Lux.		8		1		2
Denmark			1			4
Portugal			2			
Ireland		2				2
Greece						
Total	68	72	71	39	1	53

Table 4.11  
Foreign securities houses in the EC and Japan  
(as of March 1990)

	Japanese affiliates in the EC		EC affiliates in Japan	
	Branch	Subsidiary	Branch	Subsidiary
UK	32	5	15	17
France	4	9	5	7
Germany	4	2	7	5
Italy	1	6		3
Spain	1	3		2
Belgium	1		1	4
Netherlands	2	1		4
Luxemburg	4			1
Denmark	2		1	4
Portugal			2	
Ireland				1
Greece				
Total	50	26	28	48

Source: Ministry of Finance, Japan

In this connection, it is worth noting that, while the economic size of the



US, Europe and Asia is roughly in the ratio 5:4:3 respectively (in terms of either GNP or GDP), the geographical distribution of Japan's outward FDI in the three major zones is approximately 9:4:3 and that of financial FDI is approximately 5:6:1. These ratios suggest that Japan's financial FDI tends to be concentrated in Europe, while Japan's non-financial FDI tends to be concentrated in the US. Most of the financial FDI in Europe, however, has been poured into Western Europe where the financial markets are most liberal.

### *United Kingdom*

*Banks* During the past decade foreign banks have sharply increased their share in the UK. Nearly 60 per cent of UK banking assets is owned by foreign banks, of which 22 per cent is controlled by Japanese banks and 10 per cent by US banks as of 1989 (see Table 4.3). The UK is the third largest host market for Japanese banks after the US and Hongkong. The participation of Japanese banks in London rose during the 1970s and 1980s. Their presence in the UK was roughly ten years behind that of US banks.

None the less, business in London by the Bank of Tokyo dates back to the 1880s. It was primarily engaged in trade-related finance for the export of silk and tea and in government-related finance. In the interwar period between 1920 and 1940, Japan's three largest commercial banks opened branches in London. Banking business in the UK really began in the 1950s with six Japanese city banks, subsequently followed by four more city banks. The start of participation in syndicated loans to non-residents in the mid 1970s pressured the remaining major banks to establish offices in London. A leading Japanese regional bank also set up a branch in London during this period. In the 1980s a growing number of Japan's regional banks established representative offices but very few of them have been turned into full-blown branches.

The expansion in syndicated-loan business, directed mainly to developing countries before 1980, was almost stifled by the emergence of the Mexican debt problem in 1982. Since then, the focus of Japanese banks has shifted towards mobilizing funds from their London branches to their headquarters in Japan or to other affiliated overseas branches. In many cases, those funds were destined for overseas loans to corporations of Japanese origin, mergers and acquisitions or management buy-outs and corporate banking business in Europe. Thus, Japanese banks in London have consistently been fund raisers, depending upon short-term borrowings from the London interbank market or from European and US banks outside London. It is doubtful, however, that Japanese banks play a major role in initiating cross-border business without any Japan-related element. Arrangers (or lead managers) of loans syndicated in Euro-markets seem mainly to lead European or US banks (see Table 4.2).



In response to the growing need of Japanese trading and manufacturing corporations for international funds, Japanese banks decided to set up subsidiary securities houses in London in the 1970s and 1980s. Their principal goal was to catch up with the general trend of diversifying means of fund raising. Inside Japan, the separation of the banking and securities businesses prevents banks from underwriting and trading securities. Outside Japan, however, there is legal scope for banks to expand their business to these activities through their securities subsidiaries.

Like US commercial banks which learned about the securities business in Euro-markets in the late 1960s and early 1970s, Japanese banks learned the securities business in the 1970s through their London subsidiaries. They subsequently expanded their securities business in Euro-markets in the 1980s. They began trading international securities, Euro-yen bonds and warrant bonds. They also assumed lead management roles for international bond issuing.

*Securities houses* With a liberal and well-established capital market, London has been predominant in the Euro-securities business, attracting most of the new issues of international bonds, most of the Euro-bond transactions in secondary markets and a substantial volume of transactions in foreign stocks and shares. Though there are no specific data on the activities of securities houses in London or Euro-markets, 'League Tables' for Euro-securities give some indication about the state of those markets (see Table 4.2).

Ranked by the number of lead management projects, the top four for Euro-bonds are Japanese securities houses. Together with two other Japanese houses, they ranked in the top twenty in 1989. In 1980 there were only two Japanese securities houses, ranking twelfth and nineteenth, in the top twenty. The league tables for Euro-straight bonds, however, present a different picture. In 1980 there was only one Japanese securities house ranking fifteenth in the top twenty; in 1989 there were five, ranking first, eighth, eleventh, seventeenth, and eighteenth. The difference in rankings between all Euro-bonds and Euro-straight bonds comes from the buoyancy of equity-related finance on which Japanese trading and manufacturing corporations relied heavily against the background of the booming Tokyo Stock Exchange in the late 1980s. Japanese securities houses had a comparative advantage in taking lead management roles for Japanese issuers. Excluding the equity-related issues, however, top positions in the league tables are mostly occupied by European and US securities companies.

It was in the early 1970s that Japan's leading securities houses (Big Four) first wished to participate in the London market. Prior to that, they preferred to do their business in Amsterdam or Luxemburg rather than London. The major part of their business was trading in Japanese securities for institutional investors. With the expansion in the Euro-bond business and the continuous

deregulation of portfolio investments in Japan, securities houses began establishing London branches or subsidiaries in 1973. By 1981 their branches had been made into subsidiaries for managerial reasons. Further expansion forced them to shift their European headquarters to London.

Following the rising number of Euro-bond issues by Japanese firms and increasing portfolio investments by Japanese investors, a second group of Japanese securities houses had been established in London by 1985. The 'Big Bang' (deregulation) in London in 1986 attracted a third group of Japanese securities houses. As of December 1989, the number of Japanese subsidiaries in London was 31, compared with 30 in Hongkong, 19 in Switzerland and 13 in the US (see Table 4.9).

The scope of their business has been widened from brokerage services to European institutional investors to the underwriting and trading of Euro-securities. However, it is only major Japanese subsidiaries that have enjoyed the wide range of securities business. Newly established subsidiaries usually start their business by trading Japanese stocks and shares and have difficulty entering into profitable business in Euro-markets. The thriving business of securities subsidiaries in London has also been helped by the rapid growth in the Euro-yen bond market since 1984. The most profitable business in the late 1980s was the underwriting of Euro-bonds, particularly Euro-warrant bonds, by Japanese issuers. Their equity-related finance had a strong influence on Euro-markets. Their influence reached a peak in 1989 but has considerably declined since the downturn in the Tokyo stock market in early 1990.

The subsidiary banks of the Big Four have not attempted any aggressive expansion of their business. Their operations are concentrated largely on making loans and offering treasury services. Their progress towards investment advisory business and custodian services has been very slow. A striking contrast is presented by the rapidly growing subsidiary securities companies of Japanese banks. This contrast between the slowly growing subsidiary banks of Japanese securities houses and the rapidly growing securities subsidiaries of Japanese banks seems to stem from the securitization process that has prevailed in Euro-markets throughout the 1980s.

### *Germany*

**Banks** While London accounts for about one-fifth of the world's international financial transactions, Germany accounts for less than 5 per cent (see Table 4.12). Although it is not a major international banking centre, Germany has attracted many banks from Japan. As of December 1989, there were fifteen branches and fifteen subsidiaries of Japanese banks in Germany (see Table 4.8). They constitute the major foreign banking group after US banks. As a host country for Japanese banks, Germany ranks second after the UK. However, the share of Japanese banks in the German market is relatively

Table 4.12  
International banking  
(share of total outstanding lending in each market, %)

	1980	1985	1987	1988	1989
Belgium	4.2	3.8	3.8	3.4	3.5
Luxembourg	6.7	4.1	4.2	4.1	4.2
France	10.8	7.1	6.7	6.3	6.7
Germany	5.5	3.2	4.0	3.8	3.7
Italy	2.3	2.2	1.9	1.9	1.8
Netherlands	4.7	2.6	2.5	2.5	2.8
Switzerland	4.5	2.6	2.8	2.4	2.2
Swiss Trustee Accounts		3.8	3.4	3.2	3.5
United Kingdom	27.0	25.4	22.1	20.9	20.5
Canada	2.7	2.3	1.5	1.3	1.3
Japan	5.0	10.8	18.7	21.0	20.6
of which:					
Japan offshore market	(n.a.)	(n.a.)	(4.0)	(6.8)	(7.1)
Other	(n.a.)	(n.a.)	(14.7)	(14.2)	(13.5)
United States	13.4	13.3	9.9	10.1	10.0
of which:					
International banking facilities	(n.a.)	(6.5)	(5.4)	(5.6)	(5.8)
Other	(n.a.)	(6.8)	(4.5)	(4.5)	(4.2)
'Offshore' banking centres	10.7	18.5	18.0	18.5	18.4

Sources: Bank for International Settlements; Bank of England *Quarterly Bulletin*, November 1989

small.

With the reopening of trade between Japan and West Germany after World War II, the first Japanese branch was set up in Hamburg in 1954 for trade-related finance. In the period between 1970 and 1975 many Japanese banks were established in Düsseldorf. In the 1970s there was a rush of Japanese banks to Frankfurt in response to the growing need of Japanese institutions for international capital. In more recent years, there has been another rush of banks to Frankfurt in response to the creation of the single internal EC market.

Most of the business units in Düsseldorf and Hamburg are in the form of branches, while in Frankfurt two-thirds of the units are in the form of subsidiaries. A branch is usually in a better position to operate on the basis of its parent's equity capital. Therefore, branches are more suitable for lending purposes than subsidiaries. For this reason, Japanese banks in Düsseldorf, whose principal business is to make loans to corporations of Japanese origin, tend to be branches.



In Frankfurt, financial business tends to be different from that of Düsseldorf or Hamburg, with securities business and treasury business predominating. A subsidiary is more appropriate for these purposes. In addition, Japanese law prohibits bank branches from engaging in securities business. None the less, Japanese subsidiaries have gradually extended their business to lead manage Deutschmark-denominated bonds and participate in syndicates for German government bonds.

Japanese banks in Germany are dependent largely on interbank transactions for expanding their capital base. Their reliance on bank deposits is minimal. The capital they raise is then directed to other Japanese subsidiaries in Germany, subject to the Bundesbank's controls on large loans and liquidity requirements. Japanese banks have to compete both among themselves and with German banks in providing cheap loans to other Japanese subsidiaries.

*Securities houses* Japan's Big Four set up their subsidiaries in Frankfurt in 1973. They initially aimed at providing Japanese stocks and shares to German investors. The expansion of their business scope was remarkably slow, partly because Germany's universal banking system enables German banks with close customer relations to offer the same brokerage services. Furthermore, it is only since 1984 that a series of deregulation measures have been introduced which have allowed foreign institutions to expand.

Those deregulation measures have included the abolition of a 25 per cent withholding tax on interest payments on bonds held by non-residents (1984), liberalization of lead management of Deutschmark-denominated bonds (1985), entry of foreign financial institutions in the syndicate for trading government bonds (1986), diversification of bond products (1986), revitalization measures for the stock market (1987) and so on. Financial deregulation allowed foreign financial institutions, in particular Swiss banks, to participate more actively in German securities markets. It also helped widen the business scope of Japanese financial institutions. Recent developments in the EC and Eastern Europe are likely to increase the importance of German financial markets. However, foreign financial institutions in Germany will continue to face strong competition from the powerful German banks.

### *Switzerland*

The share of Swiss banking in international financial markets has been less than 3 per cent in recent years (or 6 per cent including trustee accounts) (see Table 4.12). Substantial financial resources continue to flow into the Swiss market from the rest of the world and provide off-balance portfolio management business for Swiss banks. In addition, the trading of foreign bonds as well as loan syndications provide another major source of capital. Japanese banks constitute approximately one-sixth of all foreign banks in



Switzerland. The share of assets held by foreign banks is between 10 per cent and 15 per cent, but the share held by Japanese banks does not seem to be commensurate with the number of their subsidiary units.

Japanese financial institutions in Switzerland are all in the form of subsidiaries (subsidiary banks or subsidiary finance companies). The first Japanese bank was located in Zurich in 1971. All the major Japanese banks had entered the Swiss financial market (mostly in Zurich) by the end of the 1980s. At the end of 1989 there were twenty-five business units, of which eleven units had a banking licence. The rest were finance companies (see Table 4.8). Their purpose is mainly to participate in the underwriting of Swiss franc-denominated foreign bonds by Japanese issuers, also to join loan syndication and to trade securities. Unlike other foreign banks which have established portfolio management services in Switzerland, Japanese banks have only recently started the fiduciary business crucial to portfolio management services.

Like banks, finance companies are entitled to make loans to corporations. Unlike banks, finance companies do not take deposits. In addition, their authorization is not normally subject to any reciprocity requirements. In October 1988, the Swiss monetary authorities announced a review of their regulations on finance companies in order to ensure the stability of the financial system which could be undermined by lack of liquidity or adequate capital. As a result Japanese financial institutions are very concerned about the status of their finance companies in Switzerland.

In recent years, the Swiss foreign bond market has had approximately a 10 per cent share of the world's total international and foreign bond markets. Its share had been more than 20 per cent in the 1970s but with the rapid expansion of the Euro-bond market it gradually declined. In 1988, international and foreign bond offers totalled \$230 billion of which \$26 billion (or 11 per cent) was through the Swiss foreign bond market. In 1989, the amount of offers declined to \$19 billion or 7 per cent of a total of \$254 billion. Japanese issuers depended on the Swiss market for their capital requirements. In 1988, Japanese issuers raised \$44 billion through international bond markets of which \$10 billion (or 24 per cent) was through the Swiss market. In 1989, Japanese international bond issues totalled \$88 billion, of which \$13 billion (or 15 per cent) was through the Swiss market. Thus, Japanese issues constituted more than one-third of the total Swiss foreign bond offers in 1988 and more than two-thirds in 1989.

The Big Four securities houses entered the Swiss financial market in the form of finance companies in the latter half of the 1970s. They were followed by other securities houses in the 1980s. At the end of 1989, they had nineteen subsidiaries, of which two had acquired a banking licence (see Table 4.9). While almost all the subsidiaries of Japanese banks are located in Zurich, some of the subsidiaries of securities houses are located in Geneva and

Lugano. In 1983 and 1984, a few of them succeeded in lead managing Swiss franc-denominated bonds of Japanese companies. But subsequently they concentrated on brokerage services by offering Japanese stocks and shares to Swiss investors. The recent increase in Japanese bond issues in the Swiss market has been accompanied by a gradual return of Japanese subsidiaries to lead management roles. This shift has probably been caused by the weakening of their hold on that type of brokerage service by the entry of Swiss banks into the Tokyo securities market. Japanese firms also have to compete with American and European institutions which are well established in Switzerland.

## **Future trends**

The recent technological innovations, deregulation and the diversification of financial products and services have initiated a trend towards financial homogenization in major countries. Institutional demarcation between financial services such as banking and securities has become increasingly blurred. The voluminous expansion in cross-border transactions has also reinforced this tendency. Financial services of high quality are now available in all advanced countries. Financial information is now more comprehensive and available at lower costs. National differences in financial products and practices appear to be diminishing.

Nevertheless, there still remain differences caused by market segmentation and entrenched business habits. While recognizing the increased importance of uniform and open markets, national monetary authorities are very concerned about the stability of their own financial systems and are not prepared to relinquish all controls and regulations. There are several reasons for their attitude. First, confidence is very important for financial transactions. Second, stable financial flows are critical to the functioning of the rest of the economy. Third, well-functioning financial markets are essential for the efficient implementation of a government's monetary policy. As a consequence monetary authorities need to establish detailed regulations which often differ from those of other nations. National regulations have a significant impact on financial FDI.

The determinants of financial FDI are complex and numerous. The demand for financial support for the affiliates of Japanese corporations and the gravitational pull of world financial centres are two of the main motives behind Japanese financial FDI. Japanese institutions have been attracted by the less regulated markets (e.g. the US and the UK) and the more stable markets with more stable currencies (e.g. Germany and Switzerland).

While market integration is destined to proceed, differences in financial markets will not disappear. A case in point is the difference between countries that allow universal banking and countries that separate retail from investment

banking. Another example is the varying rates of withholding taxes on interests and dividends. In the 1980s, bilateral meetings between the major industrial countries provided a regular forum for resolving financial friction. These bilateral meetings have improved market access for both Japanese and foreign financial institutions and will continue to play a vital role in resolving disputes arising from divergent national regulations.

### *Aims of Japan's financial FDI*

Japanese financial institutions increased their FDI and expanded their networks in major foreign markets throughout the 1980s. No doubt, this rapid growth in Japan's financial FDI had something to do with macroeconomic conditions such as its current account surpluses and the sharp appreciation of the yen. In addition, financial innovation and deregulation during this decade provided further stimulation.

It has also been suggested that the high market valuation of Japanese financial institutions might have accelerated Japan's financial FDI. As a result they could raise cheaper funds through equity markets thereby being able to charge lower prices for their services. Such cheap funds, it is said, might have created a situation where Japanese institutions were more able to expand their activities by acquiring foreign institutions. These arguments appear to have an element of truth in that in the latter half of the 1980s the shares of Japanese institutions were highly priced, Japanese banks raised substantial amounts of equity funds, and they expanded their business and networks abroad. However, these arguments should be carefully weighed against the characteristics of financial FDI.

Japanese institutions had already started to make substantial foreign investments around 1980, well before the sharp appreciation of the yen and the bull stock market of 1985. The high level of fund raising around 1985 was aimed primarily at large-scale computerization and modernization of telecommunications in Japan's financial sector. Later it aimed partially to meet the requirements of capital adequacy under the then agreed standards of the Bank for International Settlements.

The rapid expansion of Japan's financial FDI made the presence of Japanese institutions more visible. As President Corrigan of the New York Federal Reserve Bank stated in a speech in Tokyo (12 October 1989), policy makers are concerned about the growing presence of foreign banks and the possible concentration of economic and financial power in foreign institutions. He also referred to conflicts and ambiguities concerning the regulatory responsibilities of national central banks. None the less, bilateral and multilateral talks have gone some way towards alleviating those concerns.



Three directives (the Banking Coordination Directive, the Investment Services Directive and the Directive on Liberalization of Capital Movements) form the centrepiece of the move towards financial integration within the EC. They cover such a wide range of financial services and policies that only a few tentative comments can be made here. Two elements are most likely to affect the flows of Japan's financial FDI to Europe: the single banking licence and the question of reciprocity. The first will affect the direction of financial FDI, while the second is likely to affect the timing and competitiveness of the entry of foreign institutions into the EC.

Under the 'single banking licence', a financial institution which is licensed by an EC member state will be able to engage in universal banking activities throughout the EC regardless of whether such activities are authorized in other states. In this way the single banking licence has positive effects on both the entry of new institutions and the operations of already-established institutions. This policy of 'home-country control' stipulates that while institutions are subject to the supervisory control of the home country, the monetary authority of the host country will be responsible for supervising liquidity requirements and monitoring monetary policy. This sharing of supervision between the home and host states will affect the flows of financial FDI which are fairly sensitive to subtle institutional and regulatory differences. A foreign bank that plans to apply for authorization by an EC country will be likely to seek one with less stringent supervisory control and laxer monitoring.

The reciprocity issue is more complex. The directives provide that when an application for a banking licence or other authorization is made by a financial institution of a third country, a notification will be made by the home country to the EC Commission. They also provide for EC member states to inform the Commission of any general difficulties encountered by their institutions in third countries. The Commission would want to know whether EC financial institutions have 'effective market access' to third countries. The concept of 'effective market access', however, still remains vague to many potential applicants. As a result, it is not clear how the Commission will judge the degree of required reciprocity between the EC and third countries. Nor is it clear how it will treat financial institutions from third countries with objectionable policies. As long as uncertainties remain on the eventual objectives and the application of reciprocity rules, foreign financial institutions will have difficulty planning their strategy in the EC. The uncertainties have already caused concern to Japan's financial community which fears that the integrated financial market of the EC may also be more protectionist.

There are encouraging signs that the EC Commission will seek to maintain the openness of the EC financial market. Within the EC, cities such as Amsterdam, Dublin and Madrid are emerging as significant financial centres.



Their financial deregulation is progressing and their facilities are continually improving. They have already witnessed new inflows of financial FDI. Outside the EC, Switzerland will remain the most attractive financial market. Competition will intensify among these financial centres, inviting more financial business and investment. This competition will continue before and after 1992. At present, it is difficult to predict the effect of the moves towards economic and monetary union and the possible creation of a European central bank. It is to be hoped that these developments and the ongoing reform in Eastern Europe will reinforce economic and financial dynamism in Europe and enhance the openness and competitiveness of its markets.

## Notes

- 1 The cumulative total is the aggregate of the notifications in each year. It does not necessarily correspond to actual investment amounts in each year.

## 5 Foreign direct investment in Japan: what accounts for its low penetration?

MASARU YOSHITOMI

### **How low is the penetration of FDI in Japan?**

The extremely low penetration of FDI in Japan is vividly demonstrated in Table 1. First, in 1980-88 inward FDI into Japan in terms of cumulative flows was the lowest among the G-5 countries. Second, relative to outward FDI from Japan, inward FDI into Japan was extremely small. This phenomenon is in a sense similar to the alleged 'one-way street' expansion of Japanese exports compared to its imports.

An international comparison also indicates that the activities of foreign-owned companies (FOCs) are limited in Japan compared with the other four industrial countries. Sales of manufactured goods by FOCs account for only one percent of total domestic sales in Japan compared with about 20 per cent or so in major European countries and about 10 per cent in the US. This disproportionately low penetration of FOCs in Japan is also apparent in terms of employment and exports.<sup>1</sup>

There are numerous problems with actual data on FDI with regard to definition, coverage, measurement, etc. In particular, data on the net capital stock of FDI are not readily available. The outstanding net stock of FDI is a more meaningful measurement of the presence and activities of foreign-owned companies than are annual flows of FDI. In this regard, the US Department of Commerce provides consistent data for 1986-87 on FDI outstanding, total assets, sales, employment, and net profits of all US affiliates (both majority- and minority-owned non-bank affiliates). These data also indicate an

Table 5.1  
Inward and outward foreign direct investment in G-5 countries  
(1980-88 cumulative; \$ billion)

	Inward	Outward
US	251.7	157.3
UK	64.7	133.2
Japan	2.9	96.0
Germany	9.1	52.5
France	27.9	43.3

Source: Julius (1990)

Table 5.2  
US-based Japanese firms and Japan-based American firms 1987  
(\$ million)

	Affiliates of Japanese MNEs in the US		Affiliates of US MNEs in Japan	
	Total	Manuf.	Total	Manuf.
Net Capital Stock	35,151	5,345	14,671	7,186
Total Assets	195,773	14,697	105,978	52,202
Total Sales	182,327	14,006	114,717	68,985
Net Profits	484	-6	3,205	1,967
Employment (1,000)	284.6	81.6	345.5	222.4

Source: US Department of Commerce, *Survey of Current Business*, June 1989

asymmetry between outward FDI-Japanese affiliate operations in the US and inward FDI-US affiliate operations in Japan, but such asymmetry is greatly

narrowed. In 1987, for example, US FDI outstanding in all industries in Japan amounted to about \$14.7 billion, as compared with Japan's FDI outstanding in the US of \$35.2 billion. The asymmetry is reduced to 1:2.5 (Table 2) instead of 1:30 (Table 1). In 1988, US FDI outstanding in Japan increased to \$16.9 billion, while Japan's FDI outstanding in the US rose to \$53.4 billion. Hence, the asymmetry was 1:3. In 1987, sales by US affiliates in Japan were \$106 billion, compared with \$195.8 billion registered by Japanese affiliates in the US: again the asymmetry is much smaller. In the same year US affiliates in Japan, by contrast, employed 20 per cent more people than Japanese affiliates in the US. In fact, out of the top 500 American companies (Fortune), 207 operate in Japan in one form or 308 if we include technology alliances.

Is this asymmetry unique to Japan? Table 3 compares the outward and inward US direct investment position by country. At the end of 1988, the US hosted 70 per cent more EC (twelve countries) direct investment than the EC hosted US direct investment. In particular, the asymmetry is greater for the UK and for the Netherlands which invested, respectively, two and three times more in the US than they received from the US. The asymmetry of the Netherlands is even wider than that of Japan. It is also interesting to note that in the 1960s, when the US economy was predominant in technology and managerial skills, US outward FDI was nearly eight times as large as inward FDI into the US on a cumulative flow basis (\$46.8 billion against \$6.3 billion).

We might expect such an asymmetry to be great for FDI in manufacturing in view of the rapid growth of Japan's FDI and the strength of Japanese manufacturing industries. On the contrary, however, US FDI outstanding in manufacturing in Japan was a third larger than Japanese FDI outstanding in US manufacturing in 1987. This reversed asymmetry was even more pronounced for sales and employment (Table 2). Furthermore, the share of US FDI outstanding in manufacturing accounted for about half the total outstanding in all industries in Japan. This should be compared with the fact that Japanese FDI outstanding in US manufacturing accounted for less than one-quarter of its FDI outstanding in all industries in the US.

No comparable data are available for FDI outstanding from other countries into Japan. It can at least be safely claimed that US affiliate operations in Japan appear to be grossly underestimated when measured by the cumulative flow of FDI. For instance, the cumulative flow of US FDI into Japan for 1951-88 amounted to \$6.3 billion on the basis of Ministry of Finance (MOF) statistics of FDI notification. This figure is much smaller than the \$16.9 billion outstanding of US FDI in Japan at the end of 1988, according to the US Department of Commerce.

From the MOF data, we can see the country of origin of inward FDI to Japan. According to the MOF data on cumulative flows for 1950-88, the US



Table 5.3  
Comparison of the outward and inward US direct  
investment position by country  
(\$ billion, end 1988)

	Outward Direct Investment Position		Inward Direct Investment position	
	Total	Manuf.	Total	Manuf.
All Countries	326.9	133.8	328.9	121.4
Canada	61.2	28.1	27.4	9.4
EC (12)	126.5	65.4	216.4	91.9
West Germany	21.7	14.2	23.8	13.3
UK	48.0	18.9	101.9	37.0
Netherlands	15.4	6.1	49.0	17.2
Japan	16.9	7.9	53.4	12.2

Source : US Department of Commerce June 1989

accounts for about half of the total cumulative inward FDI flows to Japan by all countries. European FDI accounts for less than one-quarter of the total (Table 4). The same MOF data also indicate that inward FDI in manufacturing industries in Japan accounts for 70 per cent of that in all industries (Table 5). This concentration of inward FDI in manufacturing in Japan may be consistent with the aforementioned high concentration of US FDI outstanding in manufacturing in Japan, accounting for half of its total FDI outstanding in all industries in Japan.

Since US FDI was predominant in the world economy until recently, we may obtain a general picture of inward FDI and foreign affiliate operations in Japan by studying the activities of American firms in Japan, supplemented by other data on European multinational company operations in Japan.

Although, as mentioned above, US Department of Commerce data indicate a reduced or even reversed asymmetry between inward and outward FDI with regard to Japan, an analysis of geographical distribution of US affiliate operations highlights an issue of 'relative' difficulties in US FDI penetration into Japan compared with the rest of the world.

Given the size of the Japanese economy, the US position of inward direct investment in Japan appears small compared to the US position in Europe. In other words, the direct investment position of the US in Japan is relatively

Table 5.4  
Foreign direct investment in Japan 1950-88 by country  
(on a registration basis)

	Value (\$ million)	Composition (per cent)
USA	6,268	49.0
Canada	152	21.2
North America, Total	6,420	50.2
UK	518	4.0
West Germany	546	4.3
France	202	1.6
Switzerland	928	7.3
Netherlands	482	3.8
Others	337	2.6
Europe, Total	3,013	23.6
Hong Kong	390	3.0
Japan	1,663	12.9
Others	1,318	10.3
World, Total	12,794	100.0

Source : Ministry of Finance

small, not necessarily in terms of Japanese outward investment, but in terms of the scale of inward investment relative to the size of the Japanese economy.

*Why is inward FDI so low?: a hypothesis*

The relatively limited presence of foreign multinational enterprises in Japan can be accounted for essentially by two factors. One is the foreign ownership restrictions imposed by the government on inward FDI in Japan until the mid 1970s. This effect is thus the legacy of the history of direct investment regulations which were not liberalized until the 1970s. The other is comprised of two elements: the international rise of Japanese high-technology industries and technologies, coupled with the Japanese management and production system in the 1980s. This issue is closely associated with the fundamental, general question of what are the determinants of outward and inward FDI of a national economy. The international rise of Japan's information technologies

**Table 5.5**  
**Foreign direct investment in Japan 1950-89 by industry**  
**(on a registration basis)**

	Value (\$ million)	Share (per cent)
<b>Manufacturing</b>	<b>10,202</b>	<b>65.2</b>
Food	283	1.8
Textiles	51	0.3
Rubber Leather	76	0.5
Chemicals	2,722	17.4
Petroleum	692	4.4
Ceramics	141	0.9
Metal	497	3.2
Machinery	5,370	34.3
Others	370	2.4
<b>Non-manufacturing</b>	<b>5,452</b>	<b>34.8</b>
Construction	82	0.5
Real Estate	794	5.1
Commerce, Trade	2,213	14.1
Services	798	5.1
Transportation	127	0.8
Telecommunication	127	0.8
Finance and Insurance	572	3.7
Others	739	4.7
<b>Grand Total</b>	<b>15,654</b>	<b>100.0</b>

Source : Ministry of Finance

and management system can easily account for Japan's outward FDI in recent years. It may also explain the relative difficulties encountered by foreign MNEs in competing with Japanese industries in the Japanese market. To what extent do technologies and production and management systems matter as determinants of inward FDI in Japan? This is the hypothetical question I would like to pursue in this chapter.

## The legacy of past regulations of FDI

After World War II, foreign companies in Japan were required to form joint ventures with Japanese firms. Because the foreign ownership ratio was invariably limited to a maximum of 50 per cent, control was maintained by the Japanese side.

A yen-based company could be established by up to 100 per cent foreign-owned companies, subject to official approval, but such a company was given no guarantee of access to foreign exchange. Yen-based companies were typically established by foreign companies which possessed an important product or technology but would neither license nor agree to enter a 50:50 joint venture. Examples are Coca Cola (1957), Pepsi Cola (1959) and Hoechst (1962). IBM was already established by 1950.

Inward investment was thus discouraged except where necessary for obtaining technology. Licensing was the most important form of obtaining foreign technology during the period of restriction. It is of course true that multinational companies usually face a fundamental choice between technology transfer by licensing or by direct investment, even if there are no restrictions on FDI in host countries, as will be discussed later. Against this fundamental choice of forms of technology transfer, the behaviour of inward FDI in Japan during the restriction period has to be assessed. Restrictions on inward FDI accentuated the bias in favour of licensing rather than direct investment.

After entering the OECD in 1964, Japan began to liberalize FDI restrictions, but in a series of careful, measured steps. The First Liberalization (July 1967), the Second Liberalization (March 1969), the Third Liberalization (September 1970) and the Fourth Liberalization (April 1971) were followed by the most substantial liberalization in May 1973, when automatic approval for up to 100 per cent foreign ownership of newly established corporations was effected for all except twenty-two industries. At the same time (May 1973), acquisition of stocks of existing companies was also liberalized up to 100 per cent foreign ownership, subject to the target company's agreement. In the subsequent three years, namely, from 1973 to 1976, eighteen out of twenty-two excepted industries were liberalized.

The government delayed liberalization for industries in which Japanese domestic enterprises needed time to consolidate their position and gain a strong competitive position. At the same time, advance announcement of liberalization programmes accelerated the efforts of Japanese enterprises to be more competitive internationally. Reflecting the strategy, liberalization started with competitive consumer durable goods such as household appliances, cameras and watches for 50 per cent foreign ownership, and some steel products, motor cycles, cement and spinning for 100 per cent foreign ownership (1967). These were followed by industrial machinery, intermediate



materials and instruments for 50 per cent ownership and steel products and electric lamps for 100 per cent ownership (1969). Subsequently, food processing, textiles, pulp and paper, chemicals, metals and machinery were liberalized for 50 per cent ownership (1969), followed by the automotive industry and all except seven industries for 50 per cent ownership (1971). The main manufacturing industries excepted from the most substantial liberalization in 1973 but liberalized in the following years were integrated circuits (1974), pharmaceuticals and agro-chemicals, ferrous alloys, electronic precision machines, gramophone records, computer manufacturing, sales and rental (all liberalized in 1975), information processing and photo sensitive materials (both in 1976). During these years, food manufacturing industries (meat products, tomato products, cooked foods for restaurants, fruit juice, etc.), and the real estate business were also liberalized.

Finally in 1980, the Foreign Exchange Law was fundamentally reformed i.e. changed from one of automatic approval to one of prior notification. In addition, foreigners were permitted in principle to acquire stocks of existing enterprises up to 100 per cent with or without the target company's agreement.

The procedure for notifying the authorities for inward FDI has been greatly simplified since then. Notification is made by submitting the appropriate forms to the Bank of Japan, and the investors may proceed with the investment the following day if there is no objection by the Ministry of Finance or the ministries responsible for the industries concerned. The relevant authorities can investigate the investment for up to a maximum of five months.

Four industries are still excepted from liberalization under the OECD Code of Liberalization of Capital Movements: (1) agriculture, fisheries and forestry; (2) mining (up to 50 per cent foreign ownership permitted), (3) petroleum refining, and (4) leather manufacturing. The major financial services and the telecommunications industry have special provisions for foreign participation which are contained in industry-specific legislation separate from the Foreign Exchange Law. The government may prohibit investments in any industry where national security or public safety is believed to be threatened and where the government wishes to maintain reciprocity with a particular country's restrictions on Japanese direct investment.

As a result of restrictive regulations, the annual average of inward FDI into Japan was only \$6 million for 1950-55, \$13 million for 1956-60, and \$36 million for 1961-65. Three-quarters of the inward FDI was accounted for by the US during these periods. The gradual liberalization after the mid 1960s resulted in some acceleration of inward FDI from \$65 million in 1966-70 to \$181 million, \$296 million and \$693 million, respectively, in 1971-75, 1976-80 and 1981-85. During these periods, the US accounted for about half of total inward FDI in Japan. Over time, European countries accounted for

increasingly more, led by the UK, Germany, the Netherlands and Switzerland.

In the mid 1970s, US FDI in Japan comprised only 2.8 per cent of its total in the world. In 1985, it rose to 3.9 per cent.

### *Any justification for restrictions?*

Inward FDI has several benefits for host countries: (1) higher efficiency of resource allocation with higher national income as a result; (2) promotion of capital accumulation; (3) improvement of the balance of payments and (4) external economies arising from the transfer of new technology and global management. The Japanese economy, suffering from foreign exchange shortfall, technology gap and capital stock shortage could have benefited from free inward FDI. Of course, the scale of these benefits is a matter for conjecture.

The major reason for restrictions on inward FDI was to prevent the monopolistic superiority of foreign-owned companies over Japanese domestic enterprises in specific industries. For example, if the automobile and computer industries had been liberalized for inward FDI, Japanese markets in those industries would have been characterized by strong monopoly or monopolistic oligopolies. As a result, large monopoly rent would have drained from Japan to investing countries. What is more controversial is whether foreign-owned companies would have been as innovative as Japanese domestic enterprises which demonstrated, albeit later, stronger capabilities of process innovation and more efficient production and management systems. Foreign technologies which Japan badly needed for upgrading its industrial structure were introduced in the form of licensing. Due to foreign exchange shortages, however, Japanese firms were restricted in their ability to pay royalties for licensing. Limited foreign exchange was carefully allocated to licensing for targeted industries by MITI.

## **Technology transfer and direct investment**

### *Fundamental rationale of direct investment*

The rationale for direct investment and FOC operations lies in their ability to evade 'the failure of certain arm's-length markets, especially those for intangible assets' (Caves 1982 p.195). Foremost among those assets is the knowledge embodied in both new products and new production processes and managerial skills. The FOC plays a central role in the creation and dissemination of new production information and management know-how. Arm's-length transfers of technology are an alternative to FDI or FOC

activities that runs more or less parallel to the trade-off between exports from the FOC's home base and direct investment. Let us explain the fundamental rationale of direct investment in somewhat greater detail.

What are the intangible assets held by a particular enterprise or firm? Successful firms possess one or several types. Such assets include: (1) technology, i.e. knowledge about how to produce a cheaper and better quality product at given input prices; (2) innovative production process and design systems; (3) know-how for a better and smoother-running production line; (4) the ability to come up with frequent innovations which can be patented; (5) special marketing skills in styling or promoting product sales; and (6) specific property such as a registered trademark or brand.

These intangible assets yield a rent to the firm to which they belong and make it successful. Why, then, cannot conventional markets put these intangible assets to efficient use? First, since an intangible asset is knowledge or know-how, it should be a public good and therefore subject to the free-rider problem. Hence, such an intangible asset tends to be underprovided in conventional markets. Second, since sellers of an intangible asset cannot reveal its details beforehand, buyers tend to suspect that its usefulness has been overstated. In other words, conventional markets do not have the instruments to assess such claims or the true value of an intangible asset. Third, closely related to the second reason, conventional markets cannot assess how well an intangible asset such as knowledge will perform when buyers actually use it. This uncertainty will cause the volume of transactions of such an intangible asset to be too small or non-existent. Fourth, a firm cannot market its intangible assets effectively without separating them from the skills and knowledge of the managerial and production team. The firm's intangible assets can perform best only with the help of its collective skills.

A fundamental question firm is, therefore, how a successful firm which possesses intangible assets can utilize them more effectively. Instead of selling or renting its intangible assets to other firms, the firm may try to derive maximum benefit from its assets internally itself. In other words, the types of market failures mentioned above, associated with arm's-length (or conventional market) transactions in intangible assets, tend to make firms conduct direct investment abroad in the form of multinational enterprise.

### *Are intangible assets firm- or industry-specific?*

This question is legitimate, because more direct investment or MNE activities are found in some of a nation's industries than in others. The firm-specific intangible assets which result in FDI appear to bear a significant relationship to characteristics of the industry to which the firm belongs, so that the prevalence of MNEs varies systematically among industries. Thus, the firm-specific assets could be distributed among successful MNEs belonging to a



specific industry. There must be some specific industries in which intangible assets are more important.

What characteristics of particular industries will foster intangible assets in their firms? Suppose attribute *X* promotes the formation of multinational enterprises. If successful firms in industry *A* have a lot of *X*, then multinationals should be prevalent in industry *A*. In other words, industry *A* requires a higher level and degree of use of intangible assets such as technology or R&D and managerial skills. Hence, firm-specific intangible assets strongly reflect characteristics of the industry to which the firm belongs. Firm-specific intangible assets are not independent of industry-specific intangible assets.

What accounts for the international distribution of source countries of foreign direct investment? Direct investment transfers a bundle of intangible assets of technology which are tied to a specific industry. In a static sense, direct investment can substitute for exports. In a dynamic world, however, it is possible for industries to have both a high level of exports and high levels of direct investment from the same source countries, since exports and FDI must be jointly determined by multinational companies' decisions. This is so particularly when both exports and foreign production are positively related to R&D activities and workers' skill levels, namely intangible assets specific to a particular industry. In this sense, characteristics of an industry can quite well explain the difference in the level of FDI by source country. Suppose there is a specific industry in a specific source country which enjoys a comparative advantage in international trade thanks to relatively superior technologies. This can explain the 'two-way street' expansion of FDI among advanced countries, since each advanced country has a comparative advantage in industry-specific technology as an intangible asset. Therefore, the international distribution of FDI by source country could essentially be explained by dynamic changes in comparative advantage as reflected in the product cycle and inter-country differences in the mix of industries.

### *Joint determination of source and host countries*

As explained above, a particular source country usually has a distinct comparative advantage in particular industries, which may explain the composition of FDI of a particular nation by industry. Can the international distribution of countries as hosts of foreign subsidiaries be similarly explained? The product cycle not only predicts the point of national origin for direct investment, but also suggests that the pattern of international allocation of direct investment can be similar to the pattern of international division of labour based on dynamic changes in comparative advantage.

Direct investment tends to be found in R&D intensive sectors, because of the importance of technologies or intangible assets. Furthermore, MNEs



consciously allocate their R&D activities around the world to their best advantage. Multinational companies must determine not only how much R&D to undertake worldwide but also where to put it, i.e. where to transfer the intangible asset of technical knowledge across national boundaries. Effective execution of R&D requires a continuous interchange of information among the manufacturing facilities of multinational companies. This is because the conduct of R&D should be located so as to address significant economic and engineering problems associated with actual manufacturing of products, also because R&D solutions should prove operational. At the same time, the strategic role of R&D requires a close interface with top corporate management. Therefore, two opposing forces are at work: centralization of R&D activities at company headquarters and the centrifugal pull of manufacturing facilities dispersed to serve various overseas markets. Overseas R&D is geared more towards development-oriented process innovation rather than toward basic research-oriented product innovation. R&D aimed at adapting multinational companies' economic activities to local market conditions is often undertaken in the local market closest to the manufacturing facilities.

Vernon's product life cycle hypothesis, i.e. export-then-produce-abroad sequence, suggests that a source country should be a fertile provider of innovation. This was clearly demonstrated by the concentration of US direct investments in innovative industries, particularly labour-saving innovations in the 1950s and 1960s. European countries' relative shortage of native raw materials has provided an incentive to innovate in material-saving technologies, a pattern reflected in the industrial composition of Europe-based multinational companies. Japanese FDI has in recent years indicated more vividly its concentration on most innovative and R&D-intensive industries, reflecting changes in its comparative advantage in international trade.

Vernon's product life cycle hypothesis also implies that a host country should have a reasonably high per capita income where demand for new labour-saving products increases and hence labour-saving innovations become more profitable. This demand is at first met by exports from high-income source countries. However, as the innovative technology and production method settle down, a search will intensify for low-cost production locations; production will then be carried on outside the source countries. As users grow more familiar with the innovation, price-elasticities of demand will increase, competition in the product market will become more intense and close contacts with customers will become even more important. These forces will work to replace exports by expanding production in other advanced countries. (As the innovation matures, production may be carried out in low-income developing countries and the advanced industrial countries will lose their comparative advantage entirely.)

Tariffs or other forms of import protection imposed on exports of source countries' products will certainly accelerate this process of replacing exports by direct investment abroad.

Gross outflows of FDI per capita vary according to income per capita among countries. Gross outflows are high for the highest-income countries, but then drop off sharply. Gross inflows also decline systematically with income per capita, but not as fast as outflows. As a result, only the richest countries have net outflows, and countries with middle income per capita exhibit the highest net inflow (Dunning 1981).

Direct investment causes Vernon's product life cycle to run its course more rapidly than if technology is diffused only through arm's-length licensing. To what extent will the transfer of technology embodied in direct investment leave the basic pattern of comparative advantage unchanged? Workers do not move internationally, but direct investment capital moves freely to wherever it can earn the highest rents from oligopolistic activities by transferring the intangible assets owned by multinational enterprises. Comparative advantage determines the pattern of international trade between exporting and importing countries. In general, however, the more mobile are the factors of production, the less comparative advantage and the more absolute advantage has to do with patterns of overseas production. Therefore, mobile direct investment capital and intangible assets must have the 'absolute' advantage of source countries over host countries. Truly integrated global markets with free movement of all production factors resemble home markets, where absolute advantage of enterprises determines winners and losers.

## **Determinants of host countries**

### *Technology and trade relationships with source countries*

The above explanations suggest that the issue of location of host countries of FDI when restrictions are imposed on imports or direct investment should be considered in the light of two fundamental factors. One is the development stage of the product life cycle of a specific innovation in source countries relative to host countries. Source countries should have greater innovative capabilities for a particular product than host countries. Such capabilities depend on the industry in which source countries are particularly skilled at innovations, that is the mix of technological advantage and disadvantage of by industry of source countries.

The other factor is comparative advantage in trade because direct investment follows and replaces trade in particular products through the Vernon-type product life cycle. This explains the relative relationships in advance of technologies in particular industries between source and host countries. It also

indicates that unless a source country has already exported to potential host countries it will find it more difficult and expensive to promote its FDI due to the lack of familiarity with business practices and the associated legal and social systems of host countries.

### *National characteristics of firm-specific intangible assets*

Technological advantage is closely associated with the managerial skills of MNEs, particularly if their operations are strongly supported by process innovation rather than footloose basic research. Companies in host countries will scrutinize which companies really hold the absolute advantage of industry- or firm-specific intangible assets over their competitors in oligopolistic markets. As mentioned earlier, a company's ability to come up with frequent innovations will make it difficult for its rivals to imitate it quickly or effectively. However, the company cannot disentangle such technological assets from the skills and knowledge of its management. The managerial skills which give rise to foreign investment are closely combined with sophisticated and specialized engineering skills in the production process and feedback linkages between customers and producers. Importantly, such technological development and production and management systems reflect the national character of business practices. Each company is an entity of a particular nation and conducts business with a general knowledge of its legal and social systems. The way of doing business is peculiar to that nation. The business firm, therefore, has a clear-cut national base and identity, with its internal planning and decision making carried out in the context of that nation's legal and social framework.

In sum, the distribution of foreign investment among host countries depends strongly on their national characteristics relative to the countries that are the principal source of multinational companies. National characteristics consist essentially of two factors: comparative advantage-based industrial characteristics determined by the development of a national economy which also give rise to industry-specific intangible assets in terms of technologies, and information costs to MNE operations arising from national characteristics of business practices such as distinct legal and social frameworks.

This second element, i.e. information costs and uncertainty, influences the destination of FDI as indicated by the sequence of moves in which a multinational enterprise expands its foreign activities among countries. Two features are outstanding here. First, the sequence shows a significant rank correlation with total GNP and with GNP per capita of the host countries, i.e. factors predicted, respectively, by scale economies of production and the product cycle model. Second, the sequences show the effect of the learning process. If the MNE is already running one product line in a given host country, this will increase the chances that it will add another product line



there rather than in another country where it has no current operation. As a corollary to this, a multinational enterprise is less enthusiastic about moving to unfamiliar and 'distant' countries (e.g. Japan, Spain, the Netherlands) than to more familiar ones because of information-cost disadvantages. Experience of exporting to a host country should, therefore, make a multinational enterprise more likely to invest directly in it due to information cost-minimizing advantages.

## **The industrial distribution of inward FDI and factors explaining the low level of penetration**

### *Additional reasons for low FDI in the early period*

During the 1950s and 1960s when Japan was a middle income country, there should have been large net inflows of FDI into it according to Vernon's product life cycle. The richest country, the US, could have made massive investments in Japan. Two basic reasons for the low penetration of FDI during those periods can be cited. One was the strict restriction on inward FDI until the mid 1970s as already explained. The other is based on the MNE's need to choose between the arm's-length transfer of technology (i.e. licensing), and the FDI-based transfer of technology. Let us explain this latter issue. The question is under what conditions MNEs prefer licensing to direct investment.

First, when MNEs have no stock of accumulated knowledge or experience of foreign markets, licensing rather than FDI will be encouraged. It is possible to conceive of cases where inward FDI into Japan would not have been on a large scale because of the sequence of destination of FDI from familiar to less familiar foreign markets, even if there had not been restrictions on inward FDI. Second, if the market in a host country for a particular product is too small to warrant FDI at a minimum efficient scale, licensing will be preferred. This could have happened in some sophisticated industries in the earlier stages of economic development in Japan. It appeared to be the case for Fuji Xerox which started as a small branch in the early 1970s due its parent company's great hesitation about investing in photocopying machine production for the Japanese market at that time.

### *Dynamic changes in comparative advantage and technologies*

What are the distinctive features of Japan's comparative advantages? In the 1980s, the penetration of inward FDI into Japan was increasingly influenced by basic factors determining the destination of FDI. Two fundamental economic forces have kept inward FDI and FOC activities in Japan at relatively low levels.



One is comparative advantage in international trade, because FDI follows and replaces trade in particular products through the product life cycle, as discussed above. Industries in which exporting countries have a comparative advantage over host countries will also witness outward FDI into such host countries because intangible assets held by MNEs strongly reflect the industrial characteristics and industry-specific technologies of their national origin. In the 1980s, European MNEs had comparative advantages in some industries over Japan. The list of such industries has become rather short and is limited largely to pharmaceuticals and some general machinery. In earlier periods, the US had held comparative advantage in automobiles, semiconductors, computers etc. Inward FDI in these industries was prohibited until the mid 1970s, unless joint ventures were agreed upon with Japanese companies. While the Japanese economy has gained a comparative advantage in these industries, the US has kept its comparative advantage in telecommunications, aircraft, satellites, space and defence industries. Reflecting the nature of these industries, i.e. extremely large economies of scale and close relations with international security, FDI in them tends to be relatively limited. The Japanese economy now holds strong comparative advantages in other high-technology areas such as automobiles, VTRs, DRAM semiconductors and computers. As a matter of fact, these four highly R&D intensive products accounted for more than 95 per cent of the bilateral trade imbalance of nearly \$50 billion between the US and Japan in 1989.

In general, the quick and dynamic advance of Japan's comparative advantage towards ever more R&D-intensive products has altered the relationship between source and host countries. Japan, once a potential host country of inward FDI, has become a rising source country of outward FDI. This suggests that difficulties surrounding inward FDI in Japan may be a reflection of the rapid advance of Japanese high technologies in the 1970s and 1980s arising from this dynamic transformation of Japan's industrial mix of comparative advantage. Japanese firm-specific intangible assets have become richer owing to the advancement of technologies specific to the industries/firms to which they belong.

The industrial mix and the low penetration of inward FDI in Japan is closely related to the extremely small proportion of manufactured imports relative to total imports into the country or to GNP, given that FDI can be expected to follow exports and replace them later. The issue is whether this distinctively low import penetration is a reflection of either trade barriers, both official and unofficial, or the equally distinctive feature of Japan's resource endowments. This issue has been studied intensively (in particular, see Saxonhouse 1983, Leamer 1988 and OECD 1989). The results are that Japan's distinctive trade structure essentially reflects its equally distinctive structure of comparative advantage, determined by inter-industry differences in its production factor intensities.

The comparative advantage theorem stresses the relative abundance of particular production factors compared with other factors. Even if absolute levels of accumulated human skills and physical capital are the same in Japan as in other countries, its relative abundance of such skills and capital is much greater since its land and natural resources are extremely scarce, as reflected, for example, in its extraordinarily high GNP per acre (more than thirty times and five times as high as in the US and western Germany, respectively). Table 6 summarizes Japan's distinctive resource endowments. The dynamic changes in Japan's comparative advantage from unskilled labour-intensive to capital-intensive and R&D-intensive manufactured products over the past three decades, have also been demonstrated econometrically (Balassa and Noland 1989, Owen 1988, Grossman 1989). Table 7 shows this structural transformation of Japan's tradable goods sector. Thus, Japan's trade structure and its evolution can be explained largely by the variables drawn from the factor-proportions theory of trade (Heckscher-Ohlin). In particular, R&D intensity accounts for a good deal of the dynamic change in Japan's revealed comparative advantage, as demonstrated by Table 5.8.

While factor proportions can account for the distinctive feature of Japan's inter-industry trade structure, another striking aspect of Japan's external trade has been emphasized: its extremely low participation in intra-industry trade. For instance, an empirical examination of Japan's participation in intra-industry international trade indicates that actual imports of manufactured goods in 1985 were about 40 per cent less than would be theoretically expected in the absence of trade barriers (Lawrence 1987). With regard to Lawrence's econometric estimate of intra-industry trade, however, serious misspecifications seem to be problematic (Srinivasan and Hamada 1989). Furthermore, the substantial appreciation of the yen after 1985 appears to have overcome any existing 'invisible private barriers' which are like tariffs rather than import quotas (Lawrence 1987): the volume of Japan's imports of manufactured goods jumped by 110 per cent from 1985 to 1989, which would have not happened under barriers such as import quotas. But it is still not clear to what extent Japan's distinctive factor proportions, which can explain its low manufactured imports, can also account for its low participation in intra-industry trade.

*Trade-technology-oligopoly nexus* A small but growing number of recent empirical studies attempt to analyze the interrelations between international trade and industrial organizations or market structure. These studies depart from the traditional premise by treating firms as oligopolists rather than anonymous pure competitors. Firm behaviour, both domestic and foreign, may thus be described as an oligopolistic game, with market share in world trade as its objective. The outcome can be determined by certain strategic variables such as product differentiation, R&D and tangible investment undertaken by

Table 5.1  
Inward and outward foreign direct investment in G-5 countries  
(1980-88 cumulative; \$ billion)

	Inward	Outward
US	251.7	157.3
UK	64.7	133.2
Japan	2.9	96.0
Germany	9.1	52.5
France	27.9	43.3

Source: Julius (1990)

Table 5.2  
US-based Japanese firms and Japan-based American firms 1987  
(\$ million)

	Affiliates of Japanese MNEs in the US		Affiliates of US MNEs in Japan	
	Total	Manuf.	Total	Manuf.
Net Capital Stock	35,151	5,345	14,671	7,186
Total Assets	195,773	14,697	105,978	52,202
Total Sales	182,327	14,006	114,717	68,985
Net Profits	484	-6	3,205	1,967
Employment (1,000)	284.6	81.6	345.5	222.4

Source: US Department of Commerce, *Survey of Current Business*, June 1989

asymmetry between outward FDI-Japanese affiliate operations in the US and inward FDI-US affiliate operations in Japan, but such asymmetry is greatly



narrowed. In 1987, for example, US FDI outstanding in all industries in Japan amounted to about \$14.7 billion, as compared with Japan's FDI outstanding in the US of \$35.2 billion. The asymmetry is reduced to 1:2.5 (Table 2) instead of 1:30 (Table 1). In 1988, US FDI outstanding in Japan increased to \$16.9 billion, while Japan's FDI outstanding in the US rose to \$53.4 billion. Hence, the asymmetry was 1:3. In 1987, sales by US affiliates in Japan were \$106 billion, compared with \$195.8 billion registered by Japanese affiliates in the US: again the asymmetry is much smaller. In the same year US affiliates in Japan, by contrast, employed 20 per cent more people than Japanese affiliates in the US. In fact, out of the top 500 American companies (Fortune), 207 operate in Japan in one form or 308 if we include technology alliances.

Is this asymmetry unique to Japan? Table 3 compares the outward and inward US direct investment position by country. At the end of 1988, the US hosted 70 per cent more EC (twelve countries) direct investment than the EC hosted US direct investment. In particular, the asymmetry is greater for the UK and for the Netherlands which invested, respectively, two and three times more in the US than they received from the US. The asymmetry of the Netherlands is even wider than that of Japan. It is also interesting to note that in the 1960s, when the US economy was predominant in technology and managerial skills, US outward FDI was nearly eight times as large as inward FDI into the US on a cumulative flow basis (\$46.8 billion against \$6.3 billion).

We might expect such an asymmetry to be great for FDI in manufacturing in view of the rapid growth of Japan's FDI and the strength of Japanese manufacturing industries. On the contrary, however, US FDI outstanding in manufacturing in Japan was a third larger than Japanese FDI outstanding in US manufacturing in 1987. This reversed asymmetry was even more pronounced for sales and employment (Table 2). Furthermore, the share of US FDI outstanding in manufacturing accounted for about half the total outstanding in all industries in Japan. This should be compared with the fact that Japanese FDI outstanding in US manufacturing accounted for less than one-quarter of its FDI outstanding in all industries in the US.

No comparable data are available for FDI outstanding from other countries into Japan. It can at least be safely claimed that US affiliate operations in Japan appear to be grossly underestimated when measured by the cumulative flow of FDI. For instance, the cumulative flow of US FDI into Japan for 1951-88 amounted to \$6.3 billion on the basis of Ministry of Finance (MOF) statistics of FDI notification. This figure is much smaller than the \$16.9 billion outstanding of US FDI in Japan at the end of 1988, according to the US Department of Commerce.

From the MOF data, we can see the country of origin of inward FDI to Japan. According to the MOF data on cumulative flows for 1950-88, the US



Table 5.3  
Comparison of the outward and inward US direct  
investment position by country  
(\$ billion, end 1988)

	Outward Direct Investment Position		Inward Direct Investment position	
	Total	Manuf.	Total	Manuf.
All Countries	326.9	133.8	328.9	121.4
Canada	61.2	28.1	27.4	9.4
EC (12)	126.5	65.4	216.4	91.9
West Germany	21.7	14.2	23.8	13.3
UK	48.0	18.9	101.9	37.0
Netherlands	15.4	6.1	49.0	17.2
Japan	16.9	7.9	53.4	12.2

Source : US Department of Commerce June 1989

accounts for about half of the total cumulative inward FDI flows to Japan by all countries. European FDI accounts for less than one-quarter of the total (Table 4). The same MOF data also indicate that inward FDI in manufacturing industries in Japan accounts for 70 per cent of that in all industries (Table 5). This concentration of inward FDI in manufacturing in Japan may be consistent with the aforementioned high concentration of US FDI outstanding in manufacturing in Japan, accounting for half of its total FDI outstanding in all industries in Japan.

Since US FDI was predominant in the world economy until recently, we may obtain a general picture of inward FDI and foreign affiliate operations in Japan by studying the activities of American firms in Japan, supplemented by other data on European multinational company operations in Japan.

Although, as mentioned above, US Department of Commerce data indicate a reduced or even reversed asymmetry between inward and outward FDI with regard to Japan, an analysis of geographical distribution of US affiliate operations highlights an issue of 'relative' difficulties in US FDI penetration into Japan compared with the rest of the world.

Given the size of the Japanese economy, the US position of inward direct investment in Japan appears small compared to the US position in Europe. In other words, the direct investment position of the US in Japan is relatively

Table 5.4  
Foreign direct investment in Japan 1950-88 by country  
(on a registration basis)

	Value (\$ million)	Composition (per cent)
USA	6,268	49.0
Canada	152	21.2
North America, Total	6,420	50.2
UK	518	4.0
West Germany	546	4.3
France	202	1.6
Switzerland	928	7.3
Netherlands	482	3.8
Others	337	2.6
Europe, Total	3,013	23.6
Hong Kong	390	3.0
Japan	1,663	12.9
Others	1,318	10.3
World, Total	12,794	100.0

Source : Ministry of Finance

small, not necessarily in terms of Japanese outward investment, but in terms of the scale of inward investment relative to the size of the Japanese economy.

*Why is inward FDI so low?: a hypothesis*

The relatively limited presence of foreign multinational enterprises in Japan can be accounted for essentially by two factors. One is the foreign ownership restrictions imposed by the government on inward FDI in Japan until the mid 1970s. This effect is thus the legacy of the history of direct investment regulations which were not liberalized until the 1970s. The other is comprised of two elements: the international rise of Japanese high-technology industries and technologies, coupled with the Japanese management and production system in the 1980s. This issue is closely associated with the fundamental, general question of what are the determinants of outward and inward FDI of a national economy. The international rise of Japan's information technologies

Table 5.5  
Foreign direct investment in Japan 1950-89 by industry  
(on a registration basis)

	Value (\$ million)	Share (per cent)
Manufacturing	10,202	65.2
Food	283	1.8
Textiles	51	0.3
Rubber Leather	76	0.5
Chemicals	2,722	17.4
Petroleum	692	4.4
Ceramics	141	0.9
Metal	497	3.2
Machinery	5,370	34.3
Others	370	2.4
Non-manufacturing	5,452	34.8
Construction	82	0.5
Real Estate	794	5.1
Commerce, Trade	2,213	14.1
Services	798	5.1
Transportation	127	0.8
Telecommunication	127	0.8
Finance and Insurance	572	3.7
Others	739	4.7
Grand Total	15,654	100.0

Source : Ministry of Finance

and management system can easily account for Japan's outward FDI in recent years. It may also explain the relative difficulties encountered by foreign MNEs in competing with Japanese industries in the Japanese market. To what extent do technologies and production and management systems matter as determinants of inward FDI in Japan? This is the hypothetical question I would like to pursue in this chapter.

## The legacy of past regulations of FDI

After World War II, foreign companies in Japan were required to form joint ventures with Japanese firms. Because the foreign ownership ratio was invariably limited to a maximum of 50 per cent, control was maintained by the Japanese side.

A yen-based company could be established by up to 100 per cent foreign-owned companies, subject to official approval, but such a company was given no guarantee of access to foreign exchange. Yen-based companies were typically established by foreign companies which possessed an important product or technology but would neither license nor agree to enter a 50:50 joint venture. Examples are Coca Cola (1957), Pepsi Cola (1959) and Hoechst (1962). IBM was already established by 1950.

Inward investment was thus discouraged except where necessary for obtaining technology. Licensing was the most important form of obtaining foreign technology during the period of restriction. It is of course true that multinational companies usually face a fundamental choice between technology transfer by licensing or by direct investment, even if there are no restrictions on FDI in host countries, as will be discussed later. Against this fundamental choice of forms of technology transfer, the behaviour of inward FDI in Japan during the restriction period has to be assessed. Restrictions on inward FDI accentuated the bias in favour of licensing rather than direct investment.

After entering the OECD in 1964, Japan began to liberalize FDI restrictions, but in a series of careful, measured steps. The First Liberalization (July 1967), the Second Liberalization (March 1969), the Third Liberalization (September 1970) and the Fourth Liberalization (April 1971) were followed by the most substantial liberalization in May 1973, when automatic approval for up to 100 per cent foreign ownership of newly established corporations was effected for all except twenty-two industries. At the same time (May 1973), acquisition of stocks of existing companies was also liberalized up to 100 per cent foreign ownership, subject to the target company's agreement. In the subsequent three years, namely, from 1973 to 1976, eighteen out of twenty-two excepted industries were liberalized.

The government delayed liberalization for industries in which Japanese domestic enterprises needed time to consolidate their position and gain a strong competitive position. At the same time, advance announcement of liberalization programmes accelerated the efforts of Japanese enterprises to be more competitive internationally. Reflecting the strategy, liberalization started with competitive consumer durable goods such as household appliances, cameras and watches for 50 per cent foreign ownership, and some steel products, motor cycles, cement and spinning for 100 per cent foreign ownership (1967). These were followed by industrial machinery, intermediate



materials and instruments for 50 per cent ownership and steel products and electric lamps for 100 per cent ownership (1969). Subsequently, food processing, textiles, pulp and paper, chemicals, metals and machinery were liberalized for 50 per cent ownership (1969), followed by the automotive industry and all except seven industries for 50 per cent ownership (1971). The main manufacturing industries excepted from the most substantial liberalization in 1973 but liberalized in the following years were integrated circuits (1974), pharmaceuticals and agro-chemicals, ferrous alloys, electronic precision machines, gramophone records, computer manufacturing, sales and rental (all liberalized in 1975), information processing and photo sensitive materials (both in 1976). During these years, food manufacturing industries (meat products, tomato products, cooked foods for restaurants, fruit juice, etc.), and the real estate business were also liberalized.

Finally in 1980, the Foreign Exchange Law was fundamentally reformed i.e. changed from one of automatic approval to one of prior notification. In addition, foreigners were permitted in principle to acquire stocks of existing enterprises up to 100 per cent with or without the target company's agreement.

The procedure for notifying the authorities for inward FDI has been greatly simplified since then. Notification is made by submitting the appropriate forms to the Bank of Japan, and the investors may proceed with the investment the following day if there is no objection by the Ministry of Finance or the ministries responsible for the industries concerned. The relevant authorities can investigate the investment for up to a maximum of five months.

Four industries are still excepted from liberalization under the OECD Code of Liberalization of Capital Movements: (1) agriculture, fisheries and forestry; (2) mining (up to 50 per cent foreign ownership permitted), (3) petroleum refining, and (4) leather manufacturing. The major financial services and the telecommunications industry have special provisions for foreign participation which are contained in industry-specific legislation separate from the Foreign Exchange Law. The government may prohibit investments in any industry where national security or public safety is believed to be threatened and where the government wishes to maintain reciprocity with a particular country's restrictions on Japanese direct investment.

As a result of restrictive regulations, the annual average of inward FDI into Japan was only \$6 million for 1950-55, \$13 million for 1956-60, and \$36 million for 1961-65. Three-quarters of the inward FDI was accounted for by the US during these periods. The gradual liberalization after the mid 1960s resulted in some acceleration of inward FDI from \$65 million in 1966-70 to \$181 million, \$296 million and \$693 million, respectively, in 1971-75, 1976-80 and 1981-85. During these periods, the US accounted for about half of total inward FDI in Japan. Over time, European countries accounted for

increasingly more, led by the UK, Germany, the Netherlands and Switzerland.

In the mid 1970s, US FDI in Japan comprised only 2.8 per cent of its total in the world. In 1985, it rose to 3.9 per cent.

### *Any justification for restrictions?*

Inward FDI has several benefits for host countries: (1) higher efficiency of resource allocation with higher national income as a result; (2) promotion of capital accumulation; (3) improvement of the balance of payments and (4) external economies arising from the transfer of new technology and global management. The Japanese economy, suffering from foreign exchange shortfall, technology gap and capital stock shortage could have benefited from free inward FDI. Of course, the scale of these benefits is a matter for conjecture.

The major reason for restrictions on inward FDI was to prevent the monopolistic superiority of foreign-owned companies over Japanese domestic enterprises in specific industries. For example, if the automobile and computer industries had been liberalized for inward FDI, Japanese markets in those industries would have been characterized by strong monopoly or monopolistic oligopolies. As a result, large monopoly rent would have drained from Japan to investing countries. What is more controversial is whether foreign-owned companies would have been as innovative as Japanese domestic enterprises which demonstrated, albeit later, stronger capabilities of process innovation and more efficient production and management systems. Foreign technologies which Japan badly needed for upgrading its industrial structure were introduced in the form of licensing. Due to foreign exchange shortages, however, Japanese firms were restricted in their ability to pay royalties for licensing. Limited foreign exchange was carefully allocated to licensing for targeted industries by MITI.

## **Technology transfer and direct investment**

### *Fundamental rationale of direct investment*

The rationale for direct investment and FOC operations lies in their ability to evade 'the failure of certain arm's-length markets, especially those for intangible assets' (Caves 1982 p.195). Foremost among those assets is the knowledge embodied in both new products and new production processes and managerial skills. The FOC plays a central role in the creation and dissemination of new production information and management know-how. Arm's-length transfers of technology are an alternative to FDI or FOC

activities that runs more or less parallel to the trade-off between exports from the FOC's home base and direct investment. Let us explain the fundamental rationale of direct investment in somewhat greater detail.

What are the intangible assets held by a particular enterprise or firm? Successful firms possess one or several types. Such assets include: (1) technology, i.e. knowledge about how to produce a cheaper and better quality product at given input prices; (2) innovative production process and design systems; (3) know-how for a better and smoother-running production line; (4) the ability to come up with frequent innovations which can be patented; (5) special marketing skills in styling or promoting product sales; and (6) specific property such as a registered trademark or brand.

These intangible assets yield a rent to the firm to which they belong and make it successful. Why, then, cannot conventional markets put these intangible assets to efficient use? First, since an intangible asset is knowledge or know-how, it should be a public good and therefore subject to the free-rider problem. Hence, such an intangible asset tends to be underprovided in conventional markets. Second, since sellers of an intangible asset cannot reveal its details beforehand, buyers tend to suspect that its usefulness has been overstated. In other words, conventional markets do not have the instruments to assess such claims or the true value of an intangible asset. Third, closely related to the second reason, conventional markets cannot assess how well an intangible asset such as knowledge will perform when buyers actually use it. This uncertainty will cause the volume of transactions of such an intangible asset to be too small or non-existent. Fourth, a firm cannot market its intangible assets effectively without separating them from the skills and knowledge of the managerial and production team. The firm's intangible assets can perform best only with the help of its collective skills.

A fundamental question firm is, therefore, how a successful firm which possesses intangible assets can utilize them more effectively. Instead of selling or renting its intangible assets to other firms, the firm may try to derive maximum benefit from its assets internally itself. In other words, the types of market failures mentioned above, associated with arm's-length (or conventional market) transactions in intangible assets, tend to make firms conduct direct investment abroad in the form of multinational enterprise.

### *Are intangible assets firm- or industry-specific?*

This question is legitimate, because more direct investment or MNE activities are found in some of a nation's industries than in others. The firm-specific intangible assets which result in FDI appear to bear a significant relationship to characteristics of the industry to which the firm belongs, so that the prevalence of MNEs varies systematically among industries. Thus, the firm-specific assets could be distributed among successful MNEs belonging to a



specific industry. There must be some specific industries in which intangible assets are more important.

What characteristics of particular industries will foster intangible assets in their firms? Suppose attribute *X* promotes the formation of multinational enterprises. If successful firms in industry *A* have a lot of *X*, then multinationals should be prevalent in industry *A*. In other words, industry *A* requires a higher level and degree of use of intangible assets such as technology or R&D and managerial skills. Hence, firm-specific intangible assets strongly reflect characteristics of the industry to which the firm belongs. Firm-specific intangible assets are not independent of industry-specific intangible assets.

What accounts for the international distribution of source countries of foreign direct investment? Direct investment transfers a bundle of intangible assets of technology which are tied to a specific industry. In a static sense, direct investment can substitute for exports. In a dynamic world, however, it is possible for industries to have both a high level of exports and high levels of direct investment from the same source countries, since exports and FDI must be jointly determined by multinational companies' decisions. This is so particularly when both exports and foreign production are positively related to R&D activities and workers' skill levels, namely intangible assets specific to a particular industry. In this sense, characteristics of an industry can quite well explain the difference in the level of FDI by source country. Suppose there is a specific industry in a specific source country which enjoys a comparative advantage in international trade thanks to relatively superior technologies. This can explain the 'two-way street' expansion of FDI among advanced countries, since each advanced country has a comparative advantage in industry-specific technology as an intangible asset. Therefore, the international distribution of FDI by source country could essentially be explained by dynamic changes in comparative advantage as reflected in the product cycle and inter-country differences in the mix of industries.

### *Joint determination of source and host countries*

As explained above, a particular source country usually has a distinct comparative advantage in particular industries, which may explain the composition of FDI of a particular nation by industry. Can the international distribution of countries as hosts of foreign subsidiaries be similarly explained? The product cycle not only predicts the point of national origin for direct investment, but also suggests that the pattern of international allocation of direct investment can be similar to the pattern of international division of labour based on dynamic changes in comparative advantage.

Direct investment tends to be found in R&D intensive sectors, because of the importance of technologies or intangible assets. Furthermore, MNEs



consciously allocate their R&D activities around the world to their best advantage. Multinational companies must determine not only how much R&D to undertake worldwide but also where to put it, i.e. where to transfer the intangible asset of technical knowledge across national boundaries. Effective execution of R&D requires a continuous interchange of information among the manufacturing facilities of multinational companies. This is because the conduct of R&D should be located so as to address significant economic and engineering problems associated with actual manufacturing of products, also because R&D solutions should prove operational. At the same time, the strategic role of R&D requires a close interface with top corporate management. Therefore, two opposing forces are at work: centralization of R&D activities at company headquarters and the centrifugal pull of manufacturing facilities dispersed to serve various overseas markets. Overseas R&D is geared more towards development-oriented process innovation rather than toward basic research-oriented product innovation. R&D aimed at adapting multinational companies' economic activities to local market conditions is often undertaken in the local market closest to the manufacturing facilities.

Vernon's product life cycle hypothesis, i.e. export-then-produce-abroad sequence, suggests that a source country should be a fertile provider of innovation. This was clearly demonstrated by the concentration of US direct investments in innovative industries, particularly labour-saving innovations in the 1950s and 1960s. European countries' relative shortage of native raw materials has provided an incentive to innovate in material-saving technologies, a pattern reflected in the industrial composition of Europe-based multinational companies. Japanese FDI has in recent years indicated more vividly its concentration on most innovative and R&D-intensive industries, reflecting changes in its comparative advantage in international trade.

Vernon's product life cycle hypothesis also implies that a host country should have a reasonably high per capita income where demand for new labour-saving products increases and hence labour-saving innovations become more profitable. This demand is at first met by exports from high-income source countries. However, as the innovative technology and production method settle down, a search will intensify for low-cost production locations; production will then be carried on outside the source countries. As users grow more familiar with the innovation, price-elasticities of demand will increase, competition in the product market will become more intense and close contacts with customers will become even more important. These forces will work to replace exports by expanding production in other advanced countries. (As the innovation matures, production may be carried out in low-income developing countries and the advanced industrial countries will lose their comparative advantage entirely.)

Tariffs or other forms of import protection imposed on exports of source countries' products will certainly accelerate this process of replacing exports by direct investment abroad.

Gross outflows of FDI per capita vary according to income per capita among countries. Gross outflows are high for the highest-income countries, but then drop off sharply. Gross inflows also decline systematically with income per capita, but not as fast as outflows. As a result, only the richest countries have net outflows, and countries with middle income per capita exhibit the highest net inflow (Dunning 1981).

Direct investment causes Vernon's product life cycle to run its course more rapidly than if technology is diffused only through arm's-length licensing. To what extent will the transfer of technology embodied in direct investment leave the basic pattern of comparative advantage unchanged? Workers do not move internationally, but direct investment capital moves freely to wherever it can earn the highest rents from oligopolistic activities by transferring the intangible assets owned by multinational enterprises. Comparative advantage determines the pattern of international trade between exporting and importing countries. In general, however, the more mobile are the factors of production, the less comparative advantage and the more absolute advantage has to do with patterns of overseas production. Therefore, mobile direct investment capital and intangible assets must have the 'absolute' advantage of source countries over host countries. Truly integrated global markets with free movement of all production factors resemble home markets, where absolute advantage of enterprises determines winners and losers.

## **Determinants of host countries**

### *Technology and trade relationships with source countries*

The above explanations suggest that the issue of location of host countries of FDI when restrictions are imposed on imports or direct investment should be considered in the light of two fundamental factors. One is the development stage of the product life cycle of a specific innovation in source countries relative to host countries. Source countries should have greater innovative capabilities for a particular product than host countries. Such capabilities depend on the industry in which source countries are particularly skilled at innovations, that is the mix of technological advantage and disadvantage of by industry of source countries.

The other factor is comparative advantage in trade because direct investment follows and replaces trade in particular products through the Vernon-type product life cycle. This explains the relative relationships in advance of technologies in particular industries between source and host countries. It also

indicates that unless a source country has already exported to potential host countries it will find it more difficult and expensive to promote its FDI due to the lack of familiarity with business practices and the associated legal and social systems of host countries.

### *National characteristics of firm-specific intangible assets*

Technological advantage is closely associated with the managerial skills of MNEs, particularly if their operations are strongly supported by process innovation rather than footloose basic research. Companies in host countries will scrutinize which companies really hold the absolute advantage of industry- or firm-specific intangible assets over their competitors in oligopolistic markets. As mentioned earlier, a company's ability to come up with frequent innovations will make it difficult for its rivals to imitate it quickly or effectively. However, the company cannot disentangle such technological assets from the skills and knowledge of its management. The managerial skills which give rise to foreign investment are closely combined with sophisticated and specialized engineering skills in the production process and feedback linkages between customers and producers. Importantly, such technological development and production and management systems reflect the national character of business practices. Each company is an entity of a particular nation and conducts business with a general knowledge of its legal and social systems. The way of doing business is peculiar to that nation. The business firm, therefore, has a clear-cut national base and identity, with its internal planning and decision making carried out in the context of that nation's legal and social framework.

In sum, the distribution of foreign investment among host countries depends strongly on their national characteristics relative to the countries that are the principal source of multinational companies. National characteristics consist essentially of two factors: comparative advantage-based industrial characteristics determined by the development of a national economy which also give rise to industry-specific intangible assets in terms of technologies, and information costs to MNE operations arising from national characteristics of business practices such as distinct legal and social frameworks.

This second element, i.e. information costs and uncertainty, influences the destination of FDI as indicated by the sequence of moves in which a multinational enterprise expands its foreign activities among countries. Two features are outstanding here. First, the sequence shows a significant rank correlation with total GNP and with GNP per capita of the host countries, i.e. factors predicted, respectively, by scale economies of production and the product cycle model. Second, the sequences show the effect of the learning process. If the MNE is already running one product line in a given host country, this will increase the chances that it will add another product line



there rather than in another country where it has no current operation. As a corollary to this, a multinational enterprise is less enthusiastic about moving to unfamiliar and 'distant' countries (e.g. Japan, Spain, the Netherlands) than to more familiar ones because of information-cost disadvantages. Experience of exporting to a host country should, therefore, make a multinational enterprise more likely to invest directly in it due to information cost-minimizing advantages.

## **The industrial distribution of inward FDI and factors explaining the low level of penetration**

### *Additional reasons for low FDI in the early period*

During the 1950s and 1960s when Japan was a middle income country, there should have been large net inflows of FDI into it according to Vernon's product life cycle. The richest country, the US, could have made massive investments in Japan. Two basic reasons for the low penetration of FDI during those periods can be cited. One was the strict restriction on inward FDI until the mid 1970s as already explained. The other is based on the MNE's need to choose between the arm's-length transfer of technology (i.e. licensing), and the FDI-based transfer of technology. Let us explain this latter issue. The question is under what conditions MNEs prefer licensing to direct investment.

First, when MNEs have no stock of accumulated knowledge or experience of foreign markets, licensing rather than FDI will be encouraged. It is possible to conceive of cases where inward FDI into Japan would not have been on a large scale because of the sequence of destination of FDI from familiar to less familiar foreign markets, even if there had not been restrictions on inward FDI. Second, if the market in a host country for a particular product is too small to warrant FDI at a minimum efficient scale, licensing will be preferred. This could have happened in some sophisticated industries in the earlier stages of economic development in Japan. It appeared to be the case for Fuji Xerox which started as a small branch in the early 1970s due its parent company's great hesitation about investing in photocopying machine production for the Japanese market at that time.

### *Dynamic changes in comparative advantage and technologies*

What are the distinctive features of Japan's comparative advantages? In the 1980s, the penetration of inward FDI into Japan was increasingly influenced by basic factors determining the destination of FDI. Two fundamental economic forces have kept inward FDI and FOC activities in Japan at relatively low levels.



One is comparative advantage in international trade, because FDI follows and replaces trade in particular products through the product life cycle, as discussed above. Industries in which exporting countries have a comparative advantage over host countries will also witness outward FDI into such host countries because intangible assets held by MNEs strongly reflect the industrial characteristics and industry-specific technologies of their national origin. In the 1980s, European MNEs had comparative advantages in some industries over Japan. The list of such industries has become rather short and is limited largely to pharmaceuticals and some general machinery. In earlier periods, the US had held comparative advantage in automobiles, semiconductors, computers etc. Inward FDI in these industries was prohibited until the mid 1970s, unless joint ventures were agreed upon with Japanese companies. While the Japanese economy has gained a comparative advantage in these industries, the US has kept its comparative advantage in telecommunications, aircraft, satellites, space and defence industries. Reflecting the nature of these industries, i.e. extremely large economies of scale and close relations with international security, FDI in them tends to be relatively limited. The Japanese economy now holds strong comparative advantages in other high-technology areas such as automobiles, VTRs, DRAM semiconductors and computers. As a matter of fact, these four highly R&D intensive products accounted for more than 95 per cent of the bilateral trade imbalance of nearly \$50 billion between the US and Japan in 1989.

In general, the quick and dynamic advance of Japan's comparative advantage towards ever more R&D-intensive products has altered the relationship between source and host countries. Japan, once a potential host country of inward FDI, has become a rising source country of outward FDI. This suggests that difficulties surrounding inward FDI in Japan may be a reflection of the rapid advance of Japanese high technologies in the 1970s and 1980s arising from this dynamic transformation of Japan's industrial mix of comparative advantage. Japanese firm-specific intangible assets have become richer owing to the advancement of technologies specific to the industries/firms to which they belong.

The industrial mix and the low penetration of inward FDI in Japan is closely related to the extremely small proportion of manufactured imports relative to total imports into the country or to GNP, given that FDI can be expected to follow exports and replace them later. The issue is whether this distinctively low import penetration is a reflection of either trade barriers, both official and unofficial, or the equally distinctive feature of Japan's resource endowments. This issue has been studied intensively (in particular, see Saxonhouse 1983, Leamer 1988 and OECD 1989). The results are that Japan's distinctive trade structure essentially reflects its equally distinctive structure of comparative advantage, determined by inter-industry differences in its production factor intensities.

The comparative advantage theorem stresses the relative abundance of particular production factors compared with other factors. Even if absolute levels of accumulated human skills and physical capital are the same in Japan as in other countries, its relative abundance of such skills and capital is much greater since its land and natural resources are extremely scarce, as reflected, for example, in its extraordinarily high GNP per acre (more than thirty times and five times as high as in the US and western Germany, respectively). Table 6 summarizes Japan's distinctive resource endowments. The dynamic changes in Japan's comparative advantage from unskilled labour-intensive to capital-intensive and R&D-intensive manufactured products over the past three decades, have also been demonstrated econometrically (Balassa and Noland 1989, Owen 1988, Grossman 1989). Table 7 shows this structural transformation of Japan's tradable goods sector. Thus, Japan's trade structure and its evolution can be explained largely by the variables drawn from the factor-proportions theory of trade (Heckscher-Ohlin). In particular, R&D intensity accounts for a good deal of the dynamic change in Japan's revealed comparative advantage, as demonstrated by Table 5.8.

While factor proportions can account for the distinctive feature of Japan's inter-industry trade structure, another striking aspect of Japan's external trade has been emphasized: its extremely low participation in intra-industry trade. For instance, an empirical examination of Japan's participation in intra-industry international trade indicates that actual imports of manufactured goods in 1985 were about 40 per cent less than would be theoretically expected in the absence of trade barriers (Lawrence 1987). With regard to Lawrence's econometric estimate of intra-industry trade, however, serious misspecifications seem to be problematic (Srinivasan and Hamada 1989). Furthermore, the substantial appreciation of the yen after 1985 appears to have overcome any existing 'invisible private barriers' which are like tariffs rather than import quotas (Lawrence 1987): the volume of Japan's imports of manufactured goods jumped by 110 per cent from 1985 to 1989, which would have not happened under barriers such as import quotas. But it is still not clear to what extent Japan's distinctive factor proportions, which can explain its low manufactured imports, can also account for its low participation in intra-industry trade.

*Trade-technology-oligopoly nexus* A small but growing number of recent empirical studies attempt to analyze the interrelations between international trade and industrial organizations or market structure. These studies depart from the traditional premise by treating firms as oligopolists rather than anonymous pure competitors. Firm behaviour, both domestic and foreign, may thus be described as an oligopolistic game, with market share in world trade as its objective. The outcome can be determined by certain strategic variables such as product differentiation, R&D and tangible investment undertaken by

**Table 5.6**  
**International comparison of resource and physical capital endowments**

	I	II	III	IV
Japan	0.09	1.61	0.45	62.51
United States	3.68	39.60	76.93	55.50
West Germany	0.43*	29.78	6.52	68.70
France	1.32	4.24*	3.37*	66.35*
United Kingdom	0.69	23.08*	62.48*	n.a.

- I. Ratio of arable plus pasture land to the economically active population  
(1985; expressed as hectares per economically active individual)
- II. Ratio of coal output to the economically active population  
(1985; expressed as tons of oil equivalent per economically active individual multiplied by ten)
- III. Ratio of oil and gas output to economically active population  
(1985; expressed as tons of oil equivalent per economically active individual multiplied by ten)
- IV. Ratio of physical capital stock to economically active population  
(1985; expressed as thousands of 1980 US dollars per economically active individual)

Note: \*1984 figure for economically active population

Source: International Labour Organizations, Yearbook of Labour Statistics, 1986, 1987; Food and Agriculture Organisation, Production Yearbook, 1986; International Energy Agency, Energy Balances of OECD Countries, 1988; Alan Heston and Robert Summers, "An Evolving International and Intertemporal Data System Covering Real Outputs and Prices," Paper presented at NBER Mini-conference on Economic Growth, 1989.

Original Source : Grossman 1989

Table 5.7  
Structural transformation of Japan's tradeables

	Share of sector's output in total tradeables output <sup>a</sup>		Share of sector's exports in total exports		Ratio of net exports to apparent domestic consumption <sup>b</sup>	
	1969	1987	1960	1987	1960	1987
<i>Gainers</i>						
Electrical machinery	5.9	14.1	5.7	24.5	.060	.241
Motor vehicles	6.1	12.0	10.1	25.1	.120	.320
Ordinary machinery	6.5	9.9	4.5	13.9	.003	.186
Precision instruments	0.9	1.5	2.0	3.2	.115	.248
<i>Losers</i>						
Agriculture and forestry	13.4	5.4	3.3	0.1	.137	.131
Mining products	1.7	0.8	0.1	.01	.500	.692
Foods and beverages	15.9	10.5	3.3	0.6	.015	.062
Textiles	8.6	2.7	20.3	2.0	.207	.004
Primary metals	14.4	10.3	8.4	5.9	.012	.007

Notes: <sup>a</sup>Tradeables sector defined to include all manufacturing sectors plus agriculture and forestry products and mining products

<sup>b</sup>Apparent domestic consumption = output-imports-exports

Sources: Japan, Statistics Bureau, Management and Coordination Agency, *Kagaku Gijyusu Kenkyu Chosa Hokoku*, 1988 (Report on the Survey of Research and Development); Japan, Economics Planning Agency, *Kokumin Keizai Kisan Nenpo* (Annual Report on National Accounts), 1987

Original source: Grossman 1989



**Table 5.8**  
**Correlation between measures of R&D intensity**  
**and measures of Japan's revealed comparative advantage**

	13 Manufacturing sectors <sup>a</sup>			15 Tradeable sectors <sup>b</sup>		
	1960	1970	1987	1960	1970	1987
Series (1) and (3)	.236	.643	.794	.343	.687	.823
Series (1) and (4)	.117	.580	.750	.265	.427	.612
Series (2) and (3)	.324	.228	.586	.010	.328	.639
Series (2) and (4)	.489	.087	.504	.274	.308	.457

Series :

- (1) Intramural expenditure on R&D as percentage of sales
- (2) Number of researchers per 10,000 employees
- (3) Exports as percentage of output
- (4) Ratio of net exports to apparent domestic consumption

Notes: <sup>a</sup>The Manufacturing sectors are: Foods and Beverages; Textiles; Pulp and Paper, Chemicals; Primary Metals; Ordinary Machinery; Electrical Machinery; Motor Vehicles; Precision Instruments; and Other Manufacturers

<sup>b</sup>Includes 13 manufacturing sectors plus Agricultural, Forestry and Fishery Products and Mining Products.

Sources: See Table 5.6

oligopolistic firms (Yamawaki and Audretsch 1988). While these studies are typically conducted under a cross-sectional approach for one specific year, more dynamic, time-series approaches have been adopted in order to highlight dynamic changes in technology-trade relations across sectors over time (Owen 1989, Owen and van der Loeff 1989).

Both cross-sectional and time-series approaches have demonstrated that R&D expenditures and other strategic variables in trading countries (US and Japan in Yamawaki and Audretsch and US, Japan and France in Owen and van der Loeff) are determinants of trade shares in industries (at the three-digit level). More importantly, not only do the R&D intensities of individual sectors relative to those of other industries diverge within a country, but they also evolve differently over time. In particular, Owen and van der Loeff have found that Japanese R&D plays a more critical role than American technological investment, accounting for Japan's relatively better trade performance, especially with respect to its market share in world trade rather than in bilateral trade between the US and Japan. This finding is consistent with the outcome of other empirical studies, that Japanese R&D expenditures have concentrated on process innovation, product quality improvement and cost reduction.

All these studies tend to suggest that low imports of manufactured goods and the extremely rapid expansion of exports from Japan are essentially a combined reflection of two economic fundamentals. One is the distinctive production factor endowment in Heckscher-Ohlin terms. The other is the dynamic and rapid advancement in Japan's trade structure due to intensified R&D expenditure in manufacturing, particularly in oligopolistic high-technology industries.

*Inward FDI and industrial organization in Japan* As discussed earlier, the transfer of intangible assets by MNEs requires their 'absolute' advantage over competitors. Japanese firms have gained such absolute advantage by massive R&D investment. This has made it difficult for foreign competitors to make inward FDI into Japan, perhaps because of the possible weakness of their absolute advantage over Japanese enterprises.

There is, however, another important aspect to the transfer of intangible assets of source countries into Japan; that is the transfer of managerial skills and knowledge which will fit the host country's business practices and legal and social frameworks, and also exhibit absolute advantage in intangible assets over the host country's competitors. This leads us to the question of how distinctive Japan's business practices are.

The difficulty of FDI penetration is often argued to be associated with a set of official guidelines and private business practices which effectively deny entry of foreign manufactured goods into the Japanese market. When business practices lead to anti-competitive or entry-deterring results particularly, market access of FDI is often said to be restricted. If foreign firms encounter predatory or entry-deterring practices by incumbent Japanese large-scale oligopolies, they will complain about market access (Harris 1990).

In this specific context, it is worth understanding the basic functions of the so-called Keiretsu in Japan (see Appendix 5.1). This may highlight how important industrial organization is for developing high-technology products.

Two kinds of business groups exist in Japan: the Zaibatsu successors and non-Zaibatsu principal bank groups, and groups composed of large firms and their subsidiaries. The two groups are not mutually exclusive. An important difference between the two lies in the fact that the first type has neither a centralized decision-making unit nor a well-established way of regulating its members, whereas the second type centralizes decision making in the parent company. Stockholdings, strong transactional relationships, interlocking directorates and financial dependence are more or less characteristic of both groups (Goto 1982).

The most important economic functions performed by the second type of business groups are associated with transactions in intermediate and capital goods within a group. In the intermediate and capital goods markets, buyers' demand is often characterized by extremely detailed specifications which can be only be satisfied by a small number of suppliers. Three consequences arise from this basic feature. First, transaction costs would be high if the negotiations and manoeuvring involved were to be repeated for each transaction. Second, securing a stable supply of specific products becomes all the more important for keeping operations going smoothly in large firms. Third, obtaining precise technological information on specific products, pre- and post-transaction, is indispensable for uninterrupted production processes. Under these circumstances, firms must constantly seek to lower transaction costs, secure access to and obtain information on technology.

Can firms satisfy these three requirements by relying on conventional anonymous markets? Alternatively, is it more efficient to integrate transactions vertically in an enterprise through in-house production of necessary components and capital goods? The problem with the anonymous market is that it is difficult to secure no-defect, high-quality products, prompt and punctual delivery or technological information flows related to specific components and capital goods. On the other hand, in-house production of many necessary components and capital goods may entail diseconomies of scale and be hampered by the inflexibility of a too large parent company to accommodate to rapid technological changes. Transactions in a business group are designed to overcome the problems associated with both the anonymous market and in-house production, and to guarantee more effectively the quality of specific products, punctual delivery, and the provisions of pre- and post-sales information services (for a concrete example, see Asanuma 1985). These transactions go through the customized intermediate market of a business group. Business groups are not inherently exclusive nor should they be identified as structural impediments to new entrants. However, this long-term, continuous relationship between large parent companies and subcontractors



can be seen as a barrier to new entrants, both domestic and foreign, in procurement of intermediate and capital goods.

Such business practices may be one of the economic factors explaining the extremely low penetration of FDI in Japan. In other words, the successful operation of foreign-owned companies in Japan must result from the success of their intangible assets over those of Japanese enterprises in the Japanese market. Such intangible assets include not only technology and production process-driven intangible assets, but also relationships between suppliers and users in the markets of intermediate and capital goods and producers and ultimate consumers as reflected in production Keiretsu and distribution Keiretsu, respectively. Employment practices should also be taken into account.

The problems facing FOCs do not reflect government restrictions, or the low profitability of such investment, or yen appreciation, but the difficulty of reaching customers who prefer long-term continuous relationships like those in production Keiretsu, of hiring good personnel (partly due to the life-time employment system) and of obtaining effective sales channels in Japan's complex distribution system (Booz, Allen & Hamilton, Inc. 1987).

In November 1989 the Fair Trade Commission conducted a survey (published in June 1990) on how foreign subsidiaries in Japan actually see the Japanese market. Nearly 60 per cent of the total number (2,452) of foreign subsidiaries with 50 per cent or more foreign ownership gave effective answers to questionnaires and interviews. US subsidiaries accounted for about 47 per cent, and European subsidiaries for about 41 per cent of the total number of foreign subsidiaries in Japan that responded to questionnaires.

The survey indicates that half the foreign subsidiaries had encountered specific problems in the Japanese market which scarcely exist elsewhere. The top three problems, which 20-24 per cent of all the subsidiaries had encountered, are: the rigorous standards requested by customers concerning the quality of products; delivery times; and prices. It appears that these predominant problems are closely associated with the aforementioned strict conditions attached to Japanese companies' procurement practices and with the high standard of intermediate and specific capital goods achieved by production Keiretsu. The major difficulties with business practices in Japan, therefore, arise from its industrial organizations: the survey mentions longstanding relationships between customers and companies (15.7 per cent), rigorous standards and wide-ranging requests for post-sales services (14.1 per cent), distribution Keiretsu where distributors deal solely with a specific manufacturer's products (10.7 per cent) and a long-term stable supply of products (10.4 per cent).

All this evidence tends to suggest that the limit on inward FDI in Japan should be associated not with artificial barriers but with the Japanese production and management system as a whole.<sup>2</sup>



## Remaining issues to be addressed

This chapter has so far attempted to hypothesize on the low penetration of inward FDI in Japan. The hypothesis is composed of three elements: (1) the legacy of the history of regulations on inward FDI, (2) firm- and industry-specific intangible assets such as superior technology and management skills, as demonstrated by the dynamic evolution of comparative advantage, particularly in knowledge-intensive products; and (3) production and management systems or industrial organizations unique to Japan as illustrated by the economic functions of the Keiretsu (business groups).

One of the remaining questions is how far this general explanation of the low penetration of inward FDI can apply to EC FDI into Japan. For this, first of all, we need a more general analysis of the nature and characteristics of EC outward FDI in the world economy as a whole. In that broad context, we should be able identify what has caused EC FDI to penetrate so little into Japan compared with the rest of world.

Another important outstanding question is how foreign subsidiaries have overcome the difficulties presented by the Japanese market. Both arm's-length trading through anonymous markets and continuous trading with specific partners are rational in themselves. The key question is which system proves more competitive in terms of price, quality, delivery and post-sale services. The resultant asymmetry in the difficulty of entry into the domestic market in Japan and abroad can be a source of investment friction. Furthermore, the perception that only Japanese firms benefit from this asymmetry could give rise to a serious political backlash in Japan's partner countries.

How can such market-based business practices be improved by government policies, removing their demerits while maintaining their merits? This remains a big question. The SII (Structural Impediments Initiative) talks between the US and Japan should help to give a constructive resolution this question.

Despite all the difficulties, two encouraging facts can be cited. First, most foreign subsidiaries are aware of the essential conditions for success in Japan. Second, inward FDI in Japan has been increasing very rapidly in recent years, particularly since 1985.

Hans Paule, president of Braun Japan, a subsidiary of the German electric razor maker, said 'even in the case of electric razors, the Japanese market is always different from the markets of other countries. Products have always had to be *kei-sho-tan-haku* (light-small-short-thin).' This difference is rooted in general differences between the European and Japanese ways of life and tastes. 'Japanese consumers are the most demanding consumers in the world. If a product meets the high standards set by the Japanese, it can sell wherever in the world market' (Asahi Shinbun, 9 June, 1990). 'Why products cannot sell in Japan is not because of business practices in Japan but because of

products which are bad in quality, slow in delivery, and high in prices,' said some foreign subsidiaries who responded to interviews with the Fair Trade Commission.

Inward FDI into Japan has tripled from the annual average of about \$0.8 billion in 1982-84 to \$3 billion in 1988-1989. Chemicals, electrical goods/electronics, trading and finance from both the US and Europe have registered major increases. They appear to be motivated essentially by the large and growing Japanese markets and the need for a base for business expansion into the fast-growing Asian markets.

## Notes

- 1 See Julius (1990) for estimates of FOC shares in the G-5.
- 2 See also Appendix 5.1 for an overview of the Keiretsu system as a whole.

# Appendix 5.1

## Economic functions of the Keiretsu in Japan

MASARU YOSHITOMI

### Is the Zaibatsu still important?

A commonly held belief, particularly among foreigners, is that Japanese industrial society has been dominated by the so-called Zaibatsu or a large conglomerate organization controlled by a financial family. In the pre-war period, the four largest Zaibatsu held around a quarter of total paid-in capital in Japan. All Zaibatsu were dissolved after World War II. Nevertheless, Zaibatsu-related corporate groups such as Mitsui, Mitsubishi, Sumitomo and Fuji (Fuyo) are well known even today. These four are Zaibatsu successor groups. In addition, there are two other corporate groups called Sanwa and Daiichi-Kangin which have no historical antecedent as Zaibatsu but none the less have close ties through core banks.

How dominant are these six corporate groups? Transactions within a corporate group accounted for 11-12 per cent of total sales and purchases in 1981 (Fair Trade Commission of Japan, 1981). As indicated by the surprisingly small ratio of transactions within corporate groups, the Zaibatsu successors and non-Zaibatsu principal bank groups are at present not in a position to exercise monopolistic powers at home as they did during the pre-war period. They have neither a centralized decision-making unit nor a well-established way of regulating their members. Corporate presidents' club meetings for each corporate group provide a good example of information exchanges among members on a loose basis.

In sharp contrast, business groups composed of large firms and their subsidiaries centralize decision making in a parent company followed by a large number of subsidiaries (Goto 1982). This is called a production Keiretsu. In addition, there are distribution Keiretsu and financial Keiretsu. It is important to understand what relationships exist among the three different Keiretsu in terms of economic functions.

### *Production Keiretsu*

The Kanban system, commonly known overseas as the just-in-time inventory system, provides us with a good illustration of how a production Keiretsu works. The just-in-time inventory system is aimed at minimizing inventory requirements of components. This zero-inventory system of components can operate only if the following three basic requirements are met by suppliers. First, the quality of products must be perfect. If there is any possibility that products may be defective, inventories of components must be built up. Thus component suppliers must be technologically advanced enough to produce high-quality products. Second, punctual delivery and a reliable supply of components are essential. If delivery is unpredictable and the supply of components is intermittent, inventories are required. Third, in order for parent or core firms to operate their assembly plants smoothly and without interruption, post-sale information services on the technology of components and special machinery are needed. When technical and operational questions arise, they should be solved through the continuous flow of information on technology from suppliers to assembly plants even after delivery is completed.

These three requirements for the just-in-time system can be met by the in-house production system, i.e. by internalizing component production in the hands of parent or core firms. General Motors (GM) and General Electric (GE) used this system in the past. The in-house production system has, however, encountered two basic problems, diseconomies of scale in the production of components and the excessive size of the core firms.

Diseconomies of scale are typically caused by the sheer number of different components required for assembly plants for automobiles and electrical/electronics appliances, for example. The scale of a production division for a specific component may not be large enough to realize economies of scale if components are produced and utilized for the parent company only. For specific components and special machinery, users' demand is often characterized by extremely detailed specifications and can therefore be satisfied by only a relatively small number of suppliers equipped with specific technological capabilities. This makes the coordination of various vertical stages of in-house production difficult and costly.

At the same time, a parent company may tend to expand excessively as a result of efforts to internalize the production of many components. Let us



compare the following figures from GM and Toyota and from GE and Hitachi. In 1987, GM's annual sales (14.2 trillion yen) were 2.4 times larger than Toyota's (6.0 trillion yen), but GM's total number of employees (813,000) was 12.7 times greater than Toyota's (64,000). Therefore, annual sales per employee in Toyota were more than five times as large as those of GM. GE's annual sales were nearly twice as large as Hitachi's, but GE had four times as many employees. Hitachi's annual sales per employee were, therefore, about twice as high as GE's (Imai and Komiya 1989). The huge size of the US parent companies compared with the relatively slim Japanese core companies reflects in part the in-house production system of the former compared with the production Keiretsu of the latter, as does the different economic performance in terms of annual sales per employee. If a parent company becomes too large, it begins to resemble a huge bureaucracy that suffers from organizational rigidity (i.e. slow and inflexible adaptation to rapidly changing technologies), and hence may lose in the technological competition.

If costs are high and efficiency is low when a just-in-time inventory system is attempted through in-house production, what may go wrong if a parent company relies instead on the general anonymous market for the procurement of components?

As shown by the case of independent suppliers in Europe, the anonymous market cannot always guarantee uniformly high-quality, defect-free. Moreover, the anonymous market will not always meet detailed component specifications without high transaction and negotiation costs (Goto 1982). A stable supply of components is another key to the smooth operation of assembly plants, but the anonymous market is subject to cyclical fluctuations. Component suppliers in the anonymous market can hold large unfilled orders. Consequently, users may suffer from slow and erratic delivery. In the general market, component suppliers are independent of assembly companies in decision making in terms of design and product specification. Once delivery is completed, there is no established mechanism to ensure that assemblers can quickly collect technological information on specific components and capital goods from such independent suppliers.

In sum, Keiretsu transactions between core firms and subsidiaries lie in between the in-house production system and the general autonomous market, and can be designed to overcome the problems associated with of both. Keiretsu transactions are one of the mechanisms for effectively ensuring the quality of specific products, punctual delivery and the provision of post-sale information services. Such transactions are, therefore, conducted through the customized intermediate market of a business group called Keiretsu. Long-term, frequent transactions between large parent companies and subcontractors characterize such a customized intermediate market.

The question, then, arises of whether such Keiretsu transactions are exclusive because of the very nature of the long-term, continuous relationships. This question will be better answered after reviewing the financial and distribution Keiretsu.

### *Financial Keiretsu*

How does a financial Keiretsu relate to the production Keiretsu? A financial Keiretsu is characterized by two organizational arrangements: cross-stockholdings and the main-bank system. The six corporate groups (Zaibatsu successors and non-Zaibatsu principal bank groups) engage in cross-stockholdings. The top ten stock holders within the group at present account for, on average, about 23-24 per cent of the total number of stocks of companies belonging to the same groups (Fair Trade Commission of Japan 1989). Such cross-stockholdings increased substantially in the 1950s and 1960s. After World War II, holding companies were banned at the same time as the dissolution of Zaibatsu, but commercial banks were allowed to hold up to five per cent of a company's total stock. As a result, the proportion of stockholdings by individuals amounted to 69 per cent and buying-up activities increased with the aim of greenmail transactions but not straight takeovers of companies. Companies began to protect themselves from such threats by mutually holding stocks among member firms with the help of core banks of the Zaibatsu successor and non-Zaibatsu corporate groups. In the 1960s, liberalization of inward FDI into Japan in accordance with its participation in the OECD (1964) further accelerated cross-stockholdings. The purpose this time was to guard Japanese companies from foreign takeovers. Since the early 1970s there has been no increase in the proportion of cross-stockholdings. The present economic functions of such cross-stockholdings can be better understood in the context of the production Keiretsu.

Let us take the case of cross-stockholdings in Toyota which belongs to the Mitsui group. Toyota's top ten stockholders, which account for about 38 per cent of total stocks of the company, include five city commercial banks (Mitsui, Tokai, Sanwa, Daiwa, and Kyowa with a combined share of 20 per cent), one long-term credit bank (3.7 per cent), two life insurance companies (5.7 per cent), one component supplier (4.4 per cent) and one distributor (2.6 per cent). While financial institutions are dominant stockholders, not all of them belong to the same corporate group as Toyota. Two subsidiaries in the production and distribution Keiretsu combined also hold about seven per cent. At the same time, Toyota is a major stockholder (20-40 per cent of each of the main subsidiaries in the production Keiretsu. Although Toyota also owns stocks of the city commercial banks, its holdings of these banks' stocks are much smaller than their holdings of its stock. In other words, Toyota's cross-stockholdings are positive in net vis-à-vis its subsidiaries in the

production and distribution Keiretsu but negative in net vis-à-vis financial institutions in the financial Keiretsu. For the Japanese economy as a whole, the combined stocks owned by financial institutions and non-financial corporations reached 60 per cent of the total number of stocks by 1975, compared with 30 per cent in 1955, and have remained largely unchanged since then.

From this brief survey of cross-stockholdings, the financial Keiretsu appears to perform two distinctive functions. One is associated with a parent company's stockholdings of its subsidiaries in the context of a production Keiretsu. The other is related to stockholdings of such a parent company by financial institutions and also to the so-called main bank system.

An instrument of control over subsidiaries by a parent company is stockholding. In addition, the parent company provides trade credit and appoints directors to its subsidiaries from its personnel. Through these control instruments, the decisions of member firms are coordinated under the management of the large parent company, unlike the Zaibatsu successors or non-Zaibatsu principal bank groups where member firms are essentially equal in power and no single member firm can direct or subordinate other members. The dual structure of the Japanese economy is often considered an organizational hierarchy between a large company and small- and medium-scale subcontractors. However, the dual structure in the sense of huge wage differentials between large- and small-scale firms, which used to be 10 to 3-4 in the 1950s and 1960s, no longer exists. Wage differentials are now 10 to 7-8, comparable to those in the US and Europe. More importantly, subsidiaries have reached a high enough level of technological innovation and management skill for their FDI into the US and Europe to have increased rapidly in recent years.

Financial institutions' stockholdings coupled with the main bank system appear to have contributed in part to the development of farsighted business investment strategies and positive innovations by productive firms. Cross-stockholdings have even sharpened the separation of power between management and ownership through favouring farsighted management of member firms against the short-sighted interests of individual stockholders. Moreover, the main bank system has substantiated the promotion of such long-term business investment strategies and R&D expenditure.

The main bank is the largest, but not the predominant, lender to a borrowing firm among major lender banks. The main bank monitors the borrower's corporate performance on the basis of a long-term relationship, takes an active strategic role in financing the borrower's innovations through internal information exchange, and is the lender of last resort in the case of the borrower's extreme financial difficulties. The customized stable relationship brings benefits to both the lender and the borrower: the bank can minimize



reviewing and monitoring costs and the borrower can obtain credits at lower interest rates thanks to a lower risk premium.

In terms of the strategic role played by the main bank in financing innovation, the relationship between NEC and its main bank, Sumitomo Bank, gives us an interesting example. In the second half of the 1970s, NEC made massive fixed investments in semiconductor plants, substantially exceeding those of Hitachi or Fujitsu. This decision was based upon entrepreneurial foresight on the part of NEC's management regarding the technological and market potential of the possible fusion of computers and communications (which was called C&C strategy by then-president Koju Kobayashi). NEC relied heavily on Sumitomo Bank for its external financing. What enabled Sumitomo Bank to make the bold decision was the accumulation of information and knowledge on NEC's business and management behaviour thanks to long-term relationships. The main bank is not the sole lender to a borrower. At the end of the 1970s, Sumitomo Bank accounted for about 17 per cent of NEC's total external borrowing. However, Sumitomo Trust and Bank and Sumitomo Life Insurance provided another 16 per cent. It is also notable that two major long-term credit banks had another nine per cent of the share. The main bank can thus assist borrowing companies by coordinating major lenders through the exchange of and collection of information (Imai 1990).

The main bank plays the role of lender of last resort in order to rehabilitate a borrower that has fallen into a serious financial and management crisis. This is not just because the main bank, as the largest lender, has the most to lose but also because it would lose credibility as the largest collector of detailed internal information on the borrower. The conditions imposed upon the borrower are tough and the main bank sends personnel as director(s) to the borrower's executive board. Once such conditions are agreed, the continuation, not cutting off, of lending by the main bank is a key to the consolidation and reconstruction of the troubled borrower.

### *Distribution Keiretsu*

While a financial Keiretsu is characterized by two distinct relationships (i.e. one between a parent company and its subsidiaries, the other between a company as a borrower and its major financial institutions as major stockholders, including the main bank as delegated monitor), a distribution Keiretsu is characterized by one feature. That is, manufacturers systematize (Keiretsu-ka: a verb of *keiretsu*) the distribution of their own manufactured goods. Such manufacturers are concentrated essentially in industries such as automobiles, electrical/electronics appliances, and cosmetics.

In the 1950s and 1960s, these manufacturing industries were confronted by a mismatch between their mass-production capabilities and an underdeveloped



distribution system. They responded to the resulting distribution bottlenecks by vertically integrating their wholesalers and retailers and by providing them with both capital and expertise in modern organization. The manufacturers observed resale price maintenance. Besides the provision of capital, the most important technique used to attract and control distributors is the rebate system.

There are two different aspects to this vertical restraint, increased efficiency and oligopolistic price-fixing arrangements. On the one hand, efficiency can be increased if a distribution Keiretsu prevents other distributors from free-riding on nationwide advertising campaigns made by a manufacturer and encourages post- and pre-sale services (particularly important for new products in terms of technical information and repair and maintenance). On the other hand, retail price maintenance can be a powerful tool for restraining price competition at the retail level and hence for effectively fixing prices horizontally.

Such economic functions of the distribution Keiretsu have led us to suspect that oligopolistic manufacturers are in a position to enjoy high monopoly rents enabling them to engage in predatory export practices by dumping abroad. In fact, Japan's Fair Trade Commission investigated such activities in the second half of the 1960s and in 1970 charged six major electrical appliance manufacturers with collusion in price cartels for both colour and black-and-white televisions. Furthermore, in 1966 large differentials between domestic and export prices were reported in major Japanese newspapers, resulting in the following year in a nationwide boycott of televisions led by an organization of Japanese housewives (Yamamura and Vandenberg 1986).

Do such domestic cartels coupled with predatory exports still exist? This was indeed one of the most critical issues of the SII (Structural Impediments Initiative) talks, leading to a joint price survey by the US Department of Commerce and the Japanese Ministry of International Trade and Industry. The comparative survey of retail prices was made for October 1989 in two major cities in each country and was published in November 1989. Out of 122 products surveyed, 50 were of Japanese origin and were considered most revealing in terms of the Japanese manufacturers' pricing behaviour and the price differentials between Japanese and foreign (US and third country) markets. The results were quite mixed: twenty-nine products of Japanese origin were being sold at higher prices in the US than in Japan (e.g. portable CD players, video cameras, calculators, oscilloscopes, etc.), and the remaining twenty-one products were being sold at lower prices in the US (e.g. laser printers, microwave ovens, camera bodies, etc.). In the case of electronic products of Japanese origin, eighteen were being sold at higher prices in the US compared with nine at lower prices. Out of eleven products of Japanese origin categorised as capital goods, six were being sold at higher prices in the

US and five at lower prices. Of two Japanese automobiles, one sold at a higher price in the US and the other at a lower price.

In sum, the US-Japan joint comparative price survey did not reveal any systematic price differentials between Japanese manufactured products on sale at home and those on sale abroad. This finding is not to be confused with another result from the same survey which showed that more than 90 per cent of the surveyed products imported into Japan, i.e. those of US and third-country origin (mostly European), were sold at higher prices in Japan than abroad. Such high-priced imports mainly comprised foods (e.g. jam, chocolate, wine, etc.) and miscellaneous items, particularly brand-name products (e.g. automobiles, perfume, golf clubs, etc.). Judging from these findings, the high prices of imports in Japan have little to do with the distribution Keiretsu and more with the overall distribution system which is characterized by multistrata distributors as well as by a sole agent system for brand-name products.

The central question regarding Japanese business practices is whether production, finance and distribution Keiretsu tend to discourage competition and deter imports. If foreign firms encounter such practices by incumbent Japanese oligopolies, it can be claimed that market access is restricted. What kinds of indicators could reveal such undesirable results stemming from Japanese business practices?

Anti-competitive results or a cartelized domestic market should mean higher prices for products that Japanese manufacturers sell at home compared with those that they sell abroad where competition is freer and tougher. As mentioned above, however, the US-Japan joint price survey did not systematically demonstrate such price differentials for Japanese manufactured goods. Furthermore, the rate of return on capital for large-scale Japanese manufacturing companies is on average lower than that of US companies or that of foreign companies based in Japan. The number of large-scale companies in each of the main manufacturing industries is always much greater than that in the US, and the rank of the market share among the top five to ten companies in Japan has not remained fixed but rather is in flux. Market share rather than profit maximization-oriented competition is one of the well-known characteristics of Japanese business behaviour. The dynamics of technological innovation, as indicated by the uninterrupted introduction of product and process innovation, the extremely rapid reduction of production cost, and the very short product cycle of a new product after a long gestation period, do not readily allow large-scale companies consistently to reap monopolistic rents through cartelizing the domestic market.

### *Exclusive business practices?*

Do Japanese business practices deter entry or are they exclusive? Long-term, continuous transaction relationships between core firms and component

suppliers give the impression that such business practices do deter entry. Indeed, the members of suppliers to each core firm appear to be relatively stable. For instance, out of 171 member suppliers belonging to a component association with Toyota in 1984, 153 had been members of the association continuously since 1973. During the same period, there were twenty-one new entrants whereas only three left (Asanuma 1989). New entry is not impossible, and core firms continually assess their suppliers. Suppliers ranked A or B on cumulative ratings will be retained for business with core firms. Those ranked D will be abandoned while those ranked C are dealt with as marginal suppliers. This is one of the mechanisms whereby long-term, continuous relationships can be compatible with tough competition among member suppliers. Such competition is definitely needed to satisfy the three basic requirements of a successful Kanban system.

It is often claimed that automobile assembly plants as well as production Keiretsu have been transplanted abroad from Japan. At the same time, however, it is reported that as the variety of different components produced by US-based Japanese suppliers increased, the number of components produced by US-based non-Keiretsu suppliers including American ones also increased, accounting for more than 40 per cent of the total in 1988 (Public Finance Corporation for Small and Medium Enterprises, 1990). In the UK, Keiretsu-ka (systematizing) of local component suppliers by a Japanese core firm has resulted in better economic performance.

If Japanese business practice effectively restricted market access, it would be almost impossible to explain how the volume of imports of manufactured goods jumped by 101 per cent in the four years from 1985 to 1989. Imports in the machinery group, i.e. capital goods and components, increased the most (by 112 per cent). The reaction of Japanese imports to market signals such as large exchange rate fluctuations and strong domestic demand has thus proved intense. In this fundamental sense, the Japanese economy is not, contrary to the claims made by the so-called revisionists, different from other economies.

More recently, critics have pointed to the dominant portion of Japanese external trade handled through intra-Japanese firm transactions (Lawrence 1990). Trading companies which are unique to Japan play an important role in such transactions. It is, however, unclear whether trading companies restrict market access of products produced by foreign companies into Japan in order to protect Keiretsu members' interests from foreign competition.

Another study indicated that Australian-based Japanese multinational firms have an unusually strong preference for buying from Japanese as compared with US and European multinationals (Kreinen 1989). This could perhaps be a reflection of a production Keiretsu and Japanese firms' belief in quality, delivery and post-sale information services secured through Keiretsu transactions. There is, however, counter evidence as well. For example the Sumitomo Group has so far only bought 46 per cent of the group's total



computer purchases from NEC although NEC belongs to the same group (Imai 1990).

Finally, a financial Keiretsu characterized by cross-stockholdings and the main bank system partly accounts for difficulties of M&A or takeovers of Japanese companies, in particular hostile ones by foreigners. This issue requires a carefully balanced assessment between such merits as the farsighted strategy of business investment and technology development as well as customized intermediate markets on the one hand, and a need for more economic democracy (clearly defined?) of financial Keiretsu on the other.

A low penetration of inward FDI in Japan may partly be a reflection of entry difficulties of foreigners facing the Japanese economic system, characterized by the combination of cross-stockholdings and customized markets coupled with tough competition among Japanese business groups themselves.

The rapid and ongoing globalization of Japanese economic activities, particularly through FDI, poses a real challenge that will test whether the Japanese economic system characterized by Keiretsu will be one that is legitimate and viable, and hence emulated by other countries, or one that will have to be grossly modified in order to be harmonized with the way in which business practices are conducted in foreign countries.



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